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\\ \\ \\ ΑΑΑΑΤΥΙ ΧΙ ΑΕΟ ΥΕΕΕΟΟ ΤΕΤΑΓΕΤΑΟΑΙ ΑΑΟ, ΟΙ ΤΕΕΟ ΑΟΙ Ο ΕΕΕΙ ΑΟΕΕ ΑΑΑΕΕ ΥΕΕΕΕ ΑΑΓΟΑΑΑΑΑΑ ΒΕΓΑΤΙ ΟΑΑΑΕΟΑΑΙ
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\\ EAoAEOE-DOEtI IOOE OEItAOIt IE
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\\ ABt DOIt AE AA ItEOIt AE EAAtIOOOE YItAAAAEA
\\ ItEOIt AE OaOAAEO ABDOIt AOItAAOE E OEEAAEE EA
\\ ABt DOIt AEO BEItA DOEtI AO ItEOIt AEIt AE ABt AAAA
\\ ABt DOIt AE OaOAAEO AAItAOEEEOAA Et AEOAAOE E OEEAAEE EA

\\ \tItEOIt AEOEAEO AAItAaAOEAeAAAEE EA
\\ YEOIt DEAEtEO OAtUAOAAA AA AAEOt EEeAAA
\\ tEOIt Ot ItAOEOEE OOtEBAEO AAAOEOeAAA
\\ OaOAAUE Ca⁺²-EO Et ItYAtIOOAYeEO OAtYeOAAA
\\ OaOAAEO AAIt ItEO AAeEtAIAA

\\ \tEAoBAeAAEO It OItAAAAEO ItBAIEtEtUE It ItABEEAt AO
\\ NAtAAEEe xItOxIt OEEOAAEO AAAOEOeAAA
\\ AEEEt EEeEO AAEOAOItAA
\\ YEEA p16-EO OEaOAA
\\ YEEA p53-EO AAxEYeOE

\\ \tABt DOIt AEOAO AtI-EO AAeEtAItAEO ItEAeEA
\\ AOx-O AAxEYeOE
\\ EAeEOxAEOAAEEAE OOE NAtAAEO ABPEAOAAA
\\ OaOAAEO AtOEIt OEEAYEOOE OEEOAtEO AAEOAOItAA
\\ AtAt ItOEeAAeAAEO AAAOEOeAAA

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\\ EAeEOxAEOAAEEAE OOE NAtAAEO EtAOYeOAAA
\\ AEt OEIt OEEAE ItOAAIt EEEtEO OAAOEEOAAA
\\ OAYAEeEE OaOAAAAEO AAItAAOoAAA
\\ AAItAOEEEOAA AAxAOoOE OaOAAAAEO OAtAOUtAIAA

\\ \tOaOAAEO ItItAOAtEO AAeEtAItAEO ItEAeEA
\\ EAeEOxAEOAAEEAE OOE NAtAAEO ABPEAOAAA
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||| ΥΕΟΤ ΕΑΤΑΕΑ ΥΕΕΑΕΟ ΑΑΟΤ ΟΑΥΕΑ
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||| O₂
||| Na⁺
||| Ca²⁺
|| OH⁻

||| ΑΥΤΕΟΥΤΑΕ ΓΕΕΑΕΑΟΑΑΑ, ΟΙ ΤΑΕΕΥ ΕΥΑΑΟ ΟαΟΑΑΟ ΕΑΑΕΟΟ×ΑΕΕ ΟΑΑΕΕΑΕΑΕΟ ΑΑΤΑΕΑΤΑΑΑΕΕ
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||| ΑΡΕΕΑΟΑΑΟ ΝΟ-Ο ΟΕΤΕΑΕΟ

||| ×ΑΟΤΑΓΟΘΕΕ ΑΓΟΕΤ ΘΕΕΑΑΤΟΕΑ
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||| ΟαΟΑΑΕΑΑΤ Ca²⁺-ΕΟ ΑΑΤΤ ΟΑΤΕΟ ΑΑΡΕΕΑΟΑΑΑ ΑΑ ΟαΟΑΑΕΟ Ca²⁺-ΕΕ ΑΑΥΑΟΕΑΑΑΑ
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||| ΟαΟΑΑΟΥΕ Na⁺-ΕΟ ΟΑΟΑΕΕΟ ΑΑΡΤΑΕΑΑΑ

||| ×ΤΟ×Τ ΕΕΘΑΕΑΑΕΟ ΑΑΑΘΟΕΑΑΑΑ ΕΒΑΑΑΟ
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||| ×ΤΟ×Τ ΕΕΘΑΕΑΑΕΟ ΑΑΕΟΑΟΤΑΑΟ
||| ΥΕΕΑ p53-ΕΟ ΑΑΑΘΟΕΑΑΑΑΟ
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\\ \\ \\ ΑΑΤΑΑΥΕΟ, ΟΑΑΕΟΟΑΤΟΙ ΑΕΟ, ΑΑΤΙ ×ΕΟΑΕΟ
\\ \\ \\ ΟΑΑΕΟΟΑΤΟΙ ΑΕΟ, ΑΑΤΑΑΥΕΟ, ΑΑΤΙ ×ΕΟΑΕΟ
\\ \\ \\ ΟΑΑΕΟΟΑΤΟΙ ΑΕΟ, ΑΑΤΙ ×ΕΟΑΕΟ, ΑΑΤΑΑΥΕΟ
\\ \\ \\ ΑΑΤΙ ×ΕΟΑΕΟ, ΑΑΤΑΑΥΕΟ, ΟΑΑΕΟΟΑΤΟΙ ΑΕΟ

\\ \\ \\ ΑΕΙ ΑΑΑΕ ΑΑΑΘΟΑΥΕΟΟΕ ΟΕΙ ΑΟΙ ΤΕΟ ΑΑΤΑΑΥΕΟ ΟΑΑΑΕΑΥΕ ΑΥΕΤΕΥΤΑΑΑ
\\ \\ \\ αΕΘΙ ×ΕΑΕΟ ×ΟΤΘΥΕΕΟ ΑΑΑΘΟΕΑΑΑΑ
\\ \\ \\ ×ΑΘΕΟΑΑΟΟΕ αΕΘΕΑΕΕΟ ×ΟΤΘΥΕΕΟ ΑΑΕΟΑΟΙΤΑΑ
\\ \\ \\ ΟΑΤΕΤ-ΑΤΑΕΙ ΟΑΤΑΕΤΕΟ ΟΕΟΑΤΕΟ ΑΑΑΘΟΕΑΑΑΑ

//// zogadi adaptaciuri sindromis meqanizmSi monawil eobs
///parasimpatikuri nervul i sistemis agzneba
// ჰიპერკატეკოლამინემია
///histamini
///hipoglikemia

\\\\ AIT AAAE AABOAYEOOE OEI AOTI IEO რეზისტენტობი OAAEAUE AUETEUAAA
/// aETI xAEEO xOTIYEEO AAAOEAAA
\\ xAOEOAAOOE aEOEAEO xOTIYEEO AAEOAOIAA
\\ OATET-ATET OATETEO OEOATEO AAAOEAAA
\\ DAOAELDAEEEOE OEOATEO AAAOEAAA

\\\\ OOAEO-OAAOYEEO OA xOPAAEA
\\ IAI ETI A aETI xAE- EEOETAEAA aEOEAEO OEOATEO AAEOAOIAA
\\ DATEOAAOE EATAOaATEO EOTPOEAEO AOEAAYEA
\\ xAOEOAAOE aEOEAEO AOEAAYEA
\\ aETI EAETIIO-aETI xAE-EEOETAEAA aEOEAEO OEOATEO AOEAAYEA

//// zogadi adaptaciuri sindromis meqanizmSi monawil eobs
///cdomil i nervis agzneba
//gl ukokortikoidები
///parathormoni
///hipoproteiniemia

//// zogadi adaptaciuri sindromis meqanizmSi monawil eobs
//kateqolaminebi
///bradikiniini
///histamini
///parasimpatikuri nervul i sistemis agzneba

////rilizing-faktorebi gamomuSavdebian
///kuWqveSajirkvalSi
///hipofiziSi
///naTxemSi
///hipotalamusSi

\\\\ OA AOEEO AATAAOEAEEAAEE E UT EEO TAAEOIEAOE xI OTIEOEAEO
\\ IEEOT aATI YEEOEAYEEO AAOUAAA
\\ AOOAOEOEE aEDAOTAEA
\\ AOAEEAOAEA
\\ AOAEDITI

\\\\ UT EEO AOTI O IEEOTI YEEOEAYEEO AAUAAEO TAAETEUOE TI TABEETI AO
\\ AOOAOEOEE AATI AEAAYEA

\\ ΕΑΘΕΕΑΘΑΑΥΕ ΘΕΘαΕΕΘ ΒΘ×ΕΑΕ ΘΕΥΘΑΘΕΘ ΑΘΑ
\\ ΤΕΘΙΘ ΘΕΘαΕΡΑΘΥΑΕΑ ΕΑΑΕΕΘ ΑΑΓΑΕΑΑΙ ΑΕΘ ΤΑΘΑΑ
\\ ΑΘΘΑΘΕΘΕΕ ΕΙ ΤΑΑΥΕΑ

\\ \\ ΘΘΑΑΙΘΕΕ ΘΙ ΕΕΘ ΘΑΕΙ ΑΑΓΑΕΥΕ ΤΙ ΓΑΒΕΕΑΙ ΑΘ
\\ ΤΕΘΙΘ αΑΙΙ ΥΕΘΕΘΕΑΥΕΘ ΑΑΘΥΑΑΑ
\\ ΑΘΑΑΕΕΑΘΑΕΑ
\\ ΘΕΤΘΘΕΘ ΕΑΑΓΡΕΘ ×ΘΙΘΥΕΘ ΘΑΕΑΑΑΑ
\\ αΕΘΑΘΑΙΕΑ

\\ \\ ΘΘΑΑΙΘΕΕ ΘΙ ΕΕΘ ΑΘΙ Θ
\\ ΑΕΕΑΘΑΑΑ αΕΘΑΘΑΙ ΕΑΙΕΑ
\\ ΑΕΕΑΘΑΑΑ ΑΘΘΑΘΕΘΕΕ αΕΘΙ ΘΑΓΑΕΑ
\\ ΑΕΕΑΘΑΑΑ ΕΙ ΘΘΕΕΙ ΑΑΓΘΘΕ αΕΘΑΘΑΓΑΕΑ
\\ ΑΕΕΑΘΑΑΑ ΘΑΓΘΕΕ αΕΘΑΘΑΓΑΕΑ

\\ \\ ΘΘΑΑΙΘΕΕ ΘΙ ΕΕΘ ΑΘΙ Θ
\\ ΤΙ ΥΕΘΕΘΕΕΘΑ ΘΕΘαΕΕΘ ΤΙ ΥΘΕΙ ΑΑ ΤΙ ΤΑΘΑΑΘΕΕΑ
\\ ΑΘ αΑΑΑ ΘΕΘαΕΕΘ ΘΑΕΙ ΕΙ ΑΕΘΘΕ ΑΑΘΙ ΓΕΘΑΑ
\\ ΑΕΕΑΘΑΑΑ ΑΘΑΑΕΕΑΘΑΕΑ
\\ αΑΑΑ ΘΕΘαΕΕΘ ΘΑΕΙ ΕΙ ΑΕΘΘΕ ΑΑΑΓΑΒΕΕΑΑ

\\ \\ ΕΑΘΑΕΙ ΑΑΓΘΘΕ ΘΙ ΕΕ ΘΑΕΡΕΑΑ ΑΑΓΑΕΕΑΘΑΑ
\\ ΤΕΙ ΕΑΘΑΕΘΕΘ ΑΘΙ Θ
\\ ΑΘΘΑΘΕΘΕΕ αΕΘΙ ΘΑΓΑΕΕΘ ΑΘΙ Θ
\\ ΑΘΕΕΘ ΕΘΓΕΘ αΕΘΑΘΘΘΙ ×ΕΘ ΑΘΙ Θ
\\ ΕΙ ΘΙ ΤΑΘΘΕΕ ΘΕΘαΕΡΑΘΥΑΑΕΘ ΘΙ ΓΘΘΕΘ ΑΑΘΑΕΕΑΑΕΘΑ

\\ \\ αΕΘΙ ΑΙ ΕΑΓΕΘΘΕ ΘΙ ΕΕ ΘΑΕΡΕΑΑ ΑΑΓΑΕΕΑΘΑΑ
\\ ΘΕΑΑΕΙΘ, ΘΕΘαΕΕΘ, ΘΕΕαΕΘ, ΑΕΑΘΘΘΙ ΕΕΘΑΑΕΘ ΑΕΑΕ ΘΑΙ ΑΑΓΙ ΑΕΕ ΑΑΕΑΘΑΑΕΘΑ
\\ ΘΘΙ ΓΕΘΘΕ ΘΕΘαΕΑΑΓΕΘΑ
\\ ΡΑΕΑΑΕΘ ΤΙ ΘΑΑΕΕΙ ΑΕΘΑ
\\ ΘΕΘαΕΕΘ ΘΑΑΑΑΑΕΘ ΑΑΡΕΕΑΘΑΑΕΘΑ

\\ \\ αΕΘΙ ΑΙ ΕΑΓΕΘΘΕ ΘΙ ΕΕΘ ΑΘΙ Θ
\\ ΑΕΑΑΕΓΑΑ ΑΑΘΙ ΘΑΥΑΘΘΙ ΘΑΑΕ
\\ ΡΕΕΑΘΑΑΑ ΘΑ×ΕΑΘΘΕ ΑΑΘΙ ΘΑΥΑΘΘΙ ΘΑΑΕΑΑΓ
\\ ΡΕΕΑΘΑΑΑ ΘΕΤΘΑΘΕΕΘ-ΑΑΘΑΓΑΕΘΘΕ ΑΑΑΕΑΓΑ
\\ ΤΥΕΘΑΑΑ ΑΘΕΕΘ ΘΑΕΘΥΑΑΕΑ ΘΕΥαΑΕ

\\ \\ ΘΑΘΘΕΕΘΘΕ ΘΙ ΕΕΘΑ ΘΕΑΑΘΕ ΑΑΓΑΑΕΑΓΑΑΑΕΕ ×ΑΘΘΙ ΘΕΑ ΑΑΘΘΑΘΕΑΑΕΘ
\\ ΑΑΑΕΙ ΘΙ ΘΘΕΓΕ
\\ ΑΓΑΓΙ ΘΙ ΘΘΕΓΕ
\\ ΘΕΘΙ ΑΑΓΑΕ
\\ ΕΕΑΓΙ ΘΙ ΓΘΘΕ ×ΑΘΑΓΑΘΑΕ

\\ \\ ΘΘΑΑΙΘΕΕ ΘΙ ΕΕΘ ΘΑΕΙ ΑΑΓΑΕΥΕ ΤΙ ΓΑΒΕΕΑΙ ΑΘ
\\ ΘΕΘαΕΕΘ ΘΑΕΙ ΕΙ ΑΕΘΘΕ ΑΑΑΓΑΒΕΕΑΑ
\\ ΑΘΑΑΕΕΑΘΑΕΑ
\\ ΘΕΤΘΘΕΘ ΕΑΑΓΡΕΘ ×ΘΙΘΥΕΘ ΘΑΕΑΑΑΑ

\\ \u0410\u0423\u0410\u0410\u0410\u0410 \u0415\u0418\u0414\u041e\u0415\u041e\u0410\u042f\u0415\u0415\u041e \u041e\u0410\u0411\u0423\u0410\u0410\u0410 \u0410\u0410\u0415\u0415\u0410\u0410\u0410\u0410\u0410 \u041e\u0415 \u041e\u0418\u0410\u0415\u0415\u0415\u0410\u0410

\\ \u041e\u0410\u0410\u0410\u0410\u0410 \u041e\u0415 \u041e\u0418\u0410\u0415\u0415\u0415\u0410\u0410
\\ \u0418\u0418 \u042f\u0415\u041e\u0415\u0415\u0415\u0415\u0415 \u041e\u0415\u0415\u0415\u0415 \u0418\u0410\u0410 \u0418\u0418 \u0418\u0410\u0410\u0410\u0410\u0415\u0415\u0415\u0415
\\ \u0410\u0410\u0410\u0410 \u041e\u0415\u0415\u0415\u0415 \u0414\u0410\u0415\u0418 \u0415\u0418 \u0410\u0415\u0415\u0415 \u0410\u0410\u0418\u0418 \u041e\u0418 \u0415\u0410 \u0410\u0410\u0418\u0418 - \u0418 \u041e\u0410\u0410\u0418\u0418 \u0410\u0410\u0415\u0415\u0410\u0410
\\ \u0410\u0410\u0410\u0410 \u041e\u0415\u0415\u0415\u0415 \u0414\u0410\u0415\u0418 \u0415\u0418 \u0410\u0415\u0415\u0415 \u0410\u0410\u0418\u0418 \u0418\u0415\u0415\u0415\u0415\u0415
\\ \u0410\u0415\u0415\u0415\u0410\u0410\u0410\u0410 \u0410\u0410\u0410\u0415\u0415\u0415\u0410\u0415\u0415

/// travmul i Sokis paTogenezSi monawil eobs
*paTol ogiuri aRmaval i impul sacia dazianebul i qsovil ebidan
bradikardia
sinusis kvanZis funqciis Sekaveba
hiperemia

/// travmul i Sokis paTogenezSi monawil eobs
*zezRurbl ovani Sekaveba central ur nervul sistemaSi
sinusis kvanZis funqciis Sekaveba
bradikardia
aRmaval i impul saciis Sewyveta dazianebul i qsovil idan

/// travmul i Sokis paTogenezSi monawil eobs
bradikardia
sinusis kvanZis funqciis Sekaveba
aRmaval i impul saciis Sewyveta dazianebul i qsovil idan
*toqsemia

/// taqikardiis meqanizmSi travmul i Sokis dros monawil eobs
sinusis kvanZis Sekaveba
baroreceptorebis agzneba
*baroreceptorebis gamoTiSva
arteriul i hiperemia

/// taqikardiis meqanizmSi travmul i Sokis dros monawil eobs
*arteriul i hipotenzia
vol umreceptorebis gamoTiSva
baroreceptorebis agzneba
arteriul i hiperemia

/// travmul i Sokis dros
matul obs qsovil ebis mgrZnobel oba kateqol aminebi sadmi
*mcirdeba qsovil ebis mgrZnobel oba kateqol aminebi sadmi
mcirdeba qsovil ebis mgrZnobel oba insul inisadmi
matul obs qsovil ebis mgrZnobel oba gl ukokortikoidebi sadmi

/// travmul i Sokis dros

matul obs qsovil ebis mgrZnobel oba kateqol aminebi sadmi
mcirdeba qsovil ebis mgrZnobel oba insul inisadmi
*mcirdeba qsovil ebis mgrZnobel oba gl ukokortikoidebisadmi
sisxl Si mcirdeba kortikosteroidebis Semcvel oba

//// travmul i Sokis dros
viTardeba hipervol emia
*viTardeba taqikardia
viTardeba arteriul i hipertenzia
viTardeba hiperproteinemia

//// travmul i Sokis dros
mocirkul ire sisxl is masa momatebul ia
ar xdeba sisxl is paTol ogiuri deponireba
viTardeba bradikardia
*mcirdeba mocirkul ire sisxl is masa

//// travmul i Sokis dros
mocirkul ire sisxl is masa momatebul ia
xdeba sisxl is paTol ogiuri gamosrol a depo-organoebidan
*xdeba sisxl is paTol ogiuri deponireba
viTardeba bradikardia

//// kardiogenuri Soki SeiZl eba ganviTardes
*miokardiumis infarqtis dros
arteriul i hipotenziis dros
gul is kunTis distrofiis dros
kronarul i sisxl ZarRvebis tonusis daqveiTebis as

//// kardiogenuri Soki SeiZl eba ganviTardes
aTeroskl erozis dros
*morgan-edem-stoqsis sindromis dros
gul is kunTis distrofiis dros
kronarul i sisxl ZarRvebis tonusis daqveiTebis as

//// kardiogenuri Soki SeiZl eba ganviTardes
miozitis dros
aTeroskl erozis dros
*paroqsimul i taqikardiis dros
gul is kunTis distrofiis dros

\\\\ EÉÍÉÍÁÁÉÓ ÓÉàÀÒÁÉÓÁÓ
\\\\ ÓÁÆÉÓÓÉÓÉÉ ÓÉÓáÉpÁÓÚÁÁÁÉÓ ÓÁÍÁÉÓÓÉÓ ÁÉÁÍÁÓÓÉ

\\ \u0399\u0395\u039e\u0391\u0391\u0391 \u0394\u0391\u039e\u0395\u0391\u0391\u0391\u0395\u039e \u0398\u0395\u0398\u0398 \u0395\u0398\u0398 \u0399 \u0399\u0398\u0398 \u0391\u0391
\\ \u0399\u0395\u039e\u0391\u0391\u0391 \u0398\u0391\u0395\u0395\u0398\u0395\u0398\u0395\u0398 \u0398\u0395\u0398 \u0395\u0398\u0398 \u0398\u0395\u0398 \u0398\u0395\u0398 \u0398\u0395\u0398
\\ \u0391\u0398\u0395\u0398\u0391\u0391\u0391 \u0398\u0398\u0398

/// tvinis Seryevis kl inikuri gamovl inebebi dakavSirebul ia
//masiur hematomasTan
//qal asSiga wnevis momatebasTan
///simpatikuri nervul i sistemis tonusis momatebasTan
//qal asSida sisxl ZarRvebis ganvl adobis SemcirebasTan

/// tvinis Seryevis kl inikuri gamovl inebebi dakavSirebel ia
//saxis nervis centris agznebasTan
///simpatikuri nervul i sistemis tonusis siWarbesTan
//Rebinebis centris gaRizianebasTan
//masiur hematomasTan

/// tvinis Seryevis kl inikuri gamovl inebebi dakavSirebel ia
//Tval is mamozravebel i nervebis centrebis dambl asTan
//cdomil i nervis centris agznebasTan
//saxis nervis centris agznebasTan
//saxis nervis centris dambl asTan

///tvinis Seryevam SeiZl eba gamoiwviob
//qal asSiga sisxl ZarRvebis ganvl adobis Semcire
//cdomil i nervis tonusis Semcireba
///bronqospazmi
//tvinis SeSupeba

/// bradikardia viTardeba
//Saqriani diabetis dros
///hiperTermiis dros
//Tireotoqsikozis dros
//tvinis Seryevis dros

/// tvinis Seryevis dros nervul i centrebis Riziandeba
//insul inis siWarbiT
//qal asSiga wnevis momatebis ga
///simpatikuri nervul i sistemis agznebiT
//adrenal inis siWarbiT

/// vagal uri efeqtis siWarbiT xasiaTdeba
//hipoTermia
///Tireotoqsikozi
///stres-reaqcia

//tvini s Seryeva

//// tvini s Seryevis kl inikuri gamovl inebebi dakavSirebul ia
//masiur hematomaSTan
//qal aSiga sisxl ZarRvebis ganvl adobis momatebasTan
//simpatikuri nervul i sistemis tonusis momatebasTan
//qal aSiga sisxl ZarRvebis ganvl adobis SemcirebasTan

//// tvini s Seryevis kl inikuri gamovl inebebi dakavSirebul ia
//Tval is mamozravebel i nervis centrebis dambI asTan
//Tval is mamozravebel i nervebis centrebis agznebasTaᄁ
//saxis nervis centris agznebasTan
//samwvera nervis centris agznebasTan

//// hiperTermiis xel Sewyobi faqtorebia
//sigamxdre
//mZime kunTovani muSaoba
//hipotenzia
//dabal i tenianoba

//// hiperTermiis xel Semwyobi faqtorebia
sigamxdre
*simsuqne
hipotenzia
dabal i tenianoba

//// gul is avtomatizmi s da kumSvadobis darRvevebi damwvrobiTi Sokis dros
dakavSirebel ia
hipogl i kemi asTan
hiponatriemi asTan
*hiperkal iemi asTan
hipernatriemi asTan

//// ra procesebi viTardeba damwvrobis areSi maRal i temperaturis
moqmedebi sTanave`
cianozi
hial inozi
hipoTermia
*mikrocirkul aciis darRveva

//// ra procesebi viTardeba damwvrobis areSi maRal i temperaturis
moqmedebi sTanave`
cianozi

hial inozi
hipoTerma
*eqsudacia

//// mikrociirkul aciis darRveva Termul i agentisagan uSual od dauzianebe
qsovil ebSi damwvrobiTi daavadebis dros dakavSirebul ia%
*damwvrobis ubanSi sisxl is Txieri nawil is gadasvl asTan sisxl ZarRvebidan
qsovil ebSi
hipogl ikemi asTan
sisxl is sibl antis SemcirebasTan
hipergl ikemi asTan

//// pol icitemiuri hipovol emia damwvrobiTi daavadebis dros dakavSirebul ia
Sardis gamoyofis momatebasTan
I eikopeni asTan
*mikrosisxl ZarRvTa kedl ebis ganvl adobis momatebasTan damwvrobis ubanSi
hemol izTan

//// eriTroci tebis raodenobis momateba sisxl is mocul obis erTeul Si
damwvrobiTi daavadebis dros dakavSirebul ia
eriTropoezis gaZl ierebasTan
*sisxl is Txieri masis SemcirebasTan
eriTroci tebis hemol izTan
eriTroci tebis gamosrol asTan sisxl is depoebidan

//// ra ar monawil eobs cil is deficitis ganviTarebaSi damwvrobiTi daavadebis
dros
eqsudacia damwvrobis ubanSi
cil is struqturis cvl il ebebi
proteol izuri fermentebis mier cil is general izebul i daSl a
* sisxl ZarRvTa kedl is ganvl adobis Semcireba

//// romel i daavadebis dros aris SesaZl ebel i eriTroci tebis koncentraciis
momateba sisxl Si miuxedavad maTi saerTo raodenobis Semcirebisa hemol izis
gamo`
sxivuri daavadeba
*damwvrobiTi daavadeba
ql orozi
axal Sobil Ta hemol izuri anemia

//// gul is avtomatizmis da kumSvadobis darRveva damwvrobiTi Sokis dros
dakavSirebul ia
hipokal iemi asTan
hiponatriemi asTan

*kal iუმის იონების ძაზიანებულ ი უჯ რედებიდან სისხლ ის პლ აზმაში გადასვლ ასთან
ჰიპერნატრიემიასთან

//// მიკროცირკულაციის დარღვევა ტერმული აგენტისაგან უსუალ ოდ დაუზიანებელ
გსოვილ ებში დამწვრობითი დაავადების დროს დაკავშირებულია

*სისხლ ის სიბლ ანთის მომატებასთან
ცდომილ ი ნერვის აგზნებასთან
ჰიპოგლიკემიასთან
სისხლ ის სიბლ ანთის შემცირებასთან

//// ჰიპოტერმიის დეკომპენსაციის ფაზაში
მათულობს არტერიულ ი სისხლ ის ვნება
ვიტარდება ტაქიკარდია
*ვიტარდება ბრადიკარდია
იზრდება ჯანგბადის მოხმარება

//// ჰიპოტერმიის დეკომპენსაციის ფაზაში
მათულობს არტერიულ ი სისხლ ის ვნება
ვიტარდება ტაქიკარდია
*არტერიულ ი სისხლ ის ვნება ღვეითდება
იზრდება ჯანგბადის მოხმარება

//// ჰიპოტერმიის დეკომპენსაციის ფაზაში
სუნთქვა გაქსირებულია
*მცირდება ჯანგბადის მოხმარება
სიტბოს პროდუქცია იზრდება
არტერიულ ი სისხლ ის ვნება მათულობს

//// გადაცევის ხელ შემწყობი ფაქტორებია
სიმსუგნე
მარალი თენიანობა
*ტერმორეგულაციის მექანიზმების სისტემა
დაბალი თენიანობა

//// საკომპენსაციო რეაქციები ჰიპოტერმიის დროს
სიტბოს გასხივების მომატება
*განივზოლიანი კუნთების ტონუსის მომატება, კანკალი
სიმპათიკური ნერვული სისტემის ტონუსის დაღვეითება
ნივტირებათა ცვლილება დაღვეითება რვიზილი

//// საკომპენსაციო რეაქციები ჰიპოტერმიის დროს
განივზოლიანი კუნთების ტონუსის დაღვეითება
*კანის მკვებავი სისხლ ჯარღვევის სევიწროვება
სიმპათიკური ნერვული სისტემის ტონუსის დაღვეითება

hipoadrenal inemia

////sakompensacio reaqciebi hipoTermiis dros
siTbos gasxivebis momateba
*nivTierebaTa cvl is gaZl iereba RviZl Si
simpatikuri nervul i sistemis tonusis daqveiTeba
nivTierebaTa cvl is daqveiTeba RviZl Si

//// sakompensacio reaqciebSi hipoTermiis dros monawil eobs
*hiperadrenal inemia
simpatikuri nervul i sistemis tonusis daqveiTeba
ganivzol iani kunTebis tonusis daqveiTeba
hipoadrenal inemia

//// sakompensacio reaqciebSi hipoTermiis dros monawil eobs
*hipofizis mier tropul i hormonebis gamoyofa
simpatikuri nervul i sistemis tonusis daqveiTeba
ganivzol iani kunTebis tonusis daqveiTeba
hipoadrenal inemia

////sakompensacio reaqciebSi hipoTermiis dros monawil eobs
hipogl ikemia
gl ukoza
*Tiroqsini
qoSini

////organizmze maionebel i radiaciis moqmedebis Sedegad viTardeba
mzis dakvra
*genuri, qromosomuri mutaciebi
hiperTermia
hipoTermia

//// gadacivebis xel Semwyobi faqtorebia
simsuqne
maRal i tenianoba
*al kohol is didi dozis miReba
dabal i tenianoba

////el eqtrodenis Termul i moqmedeba vl indeba
WriI obiT
uj redebis membranebis pol arizebiT
*damwvrobiT
kruncxvebiT

//// el eqtrodenis meqanikuri moqmedeba vl indeba

*WriI obiT

damwvrobiT

hipertenziiT

cil is koagul aci iT

//// organizmis mdgradoba el eqtrodenis mimaRT matul obs

I eikopeniis dros

ofl ianobisas dros

kaniS wi naaRmdegobis daqvei Tebi sas

*narkozis dros

//// el eqtrodenis Termul i moqmedeba vl indeba

uj redebis membranebis pol arizebiT

*cil is koagul aci iT

hipertenziiT

kruncxvebiT

//// organizmis mdgradoba el eqtrodenis mimaRT matul obs

I eikopeniis dros

ofl ianobis dros

kaniS wi naaRmdegobis daqvei TebiS dros

*gadacivebis dros

//// organizmze el eqtrodenis zogadi moqmedeba xasiaTdeba

gul is SekumSvebis Zal is momatebiT

*sunTqvis SewyvetiT

pol iuriiT

pol akiuriiT

//// mai onebel i radiaciis mimaRT gansakuTrebiT mgrZnobi area

gul i

Tavis tvini

*Zvl is tvini

dabal i mitozuri aqtivobis uj redebi

//// organizmze mai onebel i radiaciis moqmedebis Sedegad vi Tardeba

hiperproteiniemia

arteriul i hipertenzia

miokardi ti

*hemoragiul i sindromi

//// organizmze maionebel i radiaciis moqmedebis meqanizmSi monawil eobs
*Tiol uri fermentebis inaqtivacia
gl ukoneogenezi
transaminireba
Tiol uri fermentebis aqtivacia

//// organizmze maionebel i radiaciis moqmedebis Sedegad vi Tardeba
hiperTermia
SereSevski-terneris sindromi
*uj redebis interfazuri kvdoma
mzis dakvra

//// maionebel i radiaciis mimarT gansakuTrebiT mgrZnobiarea
*maRal i mitozuri aqtivobis uj redebi
kunTovani qsovil i
nervul i qsovil i
dabal i mitozuri aqtivobis uj redebi

//// sxivuri daavadebis nawl avuri forma xasiaTdeba
hiperproteini iT
*nawl avis epiTel is mitozuri gamravl ebis daTrgunviT
nawl avis wenis sekreciis momatebiT
nawl avis epiTel is intenziuri gamravl ebiT

//// organizmze maionebel i radiaciis moqmedebis Sedegad SeiZl eba ganviTardes
*@sikvdil i sxivis qveS
hiperproteini a
mzis dakvra
hiperTermia

//// organizmze maionebel i radiaciis moqmedebis Sedegad vi Tardeba
hiperproteini a
arteriul i hipertenzia
miokardi ti
*I eikopenia

//// sxivuri daavadebis Zvl istvinovani formis mesame periods axasiaTebis
imunuri sistemis stimuli reba
*hemoragiul i sindromi
eriTroci tozi
neitrofil ia

//// sxivuri daavadebis Zvl istvinovani formis mesame periods axasiaTebis
eriTroci tozi
bradikardia
I eikoci tozi
*autointoqsikacia

//// sxivuri daavadebebis toqsemiur formas axasiaTebis
*hemodinamikis darRveva
eriTroci tozi
yabzoba
pol iuria

////sxivuri daavadebis Zvl istvinovani formis mesame periods axasiaTebis
hipoTermia
*hemopoezis mkveTri daTrgunva
eriTroci tozi
neitrofil ia

//// maionebel i radiaciis mimarT gansakuTrebiT mgrZnobiarea
gul i
Tavis tvini
*maRal i mitozuri aqtivobis uj redebi
dabal i mitozuri aqtivobis uj redebi

//// sxivuri daavadebis nawl avuri forma xasiaTdeba
nawl avis epiTel is intensiur gamravl ebiT
nawl avis wenis sekreciis momatebiT
hiperproteini iT
*intoqsikaci iT da infeqci iT

//// organizmze maionebel i radiaciis moqmedebis meqanizmSi monawil eobs
*wyl is ionizeba Tavisufal i radikal ebis warmoqmni T
gl ukoneogenezi
transaminireba
Tiol uri fermentebis aqtivacia

//// organizmze maionebel i radiaciis moqmedebis meqanizmSi monawil eobs
transaminireba
I izosomuri fermentebis inaqtivacia
mitoqondriul i fermentebis gamosrol a
*uj redebis gamravl ebis daTrgunva

//// sxivuri daavadebis Zvl istvinovani formis pirvel periods axasiaTebis

*I eikocitozi

I eikopenia

bradikardia

taqikardia

////sxivuri daavadebis Zvl istvinovani formis meore periods axasiaTebis

I eikocitozi

*I eikopenia

I imfocitozi

eritrocitozi

\\ \\ aedi EAOIEEO AOI O OAEI IDAITOAYEI OAAOYEA

\\ OEAI O DOI AOYEO AAP EAOAAA

\\ aedi AAOATAEITAEA

\\ OEIDAOEEEOE IAOOE E OEOATEO OT IOEO IT IAOAAA

\\ EATEO OEOE PAOUAAAEO AA XAOET AAA

\\ \\ OAEI IDAITOAYEI OAAOYEAOU aedi EAOIEEO AOI O IT IABEEAI AO

\\ EATEO OEOE PAOUAAAEO OAAEBOI AAA

\\ OEIDAOEEEOE IAOOE E OEOATEO OT IOEO AAOAAEAAA

\\ AATEAEI EATE EOTEAAEO OT IOEO AAOAAEAAA

\\ aedi AE EAEIA

\\ \\ aedi EAOIEEO AOI O OAEI IDAITOAYEI A

\\ IYEOAAA AOAOEOE E OEOEEO BIAA

\\ aUEOAAA OOTEAA

\\ AEEAOAAA AOEOI DAEA

\\ OEAI O DOI AOYEA IAOOET AO

\\ \\ AEAOOIT AATEO EAOIOE IT DIAAAA EBAAA

\\ OAOAAAEO IATAOATAEO DI EAOEAAA

\\ YEEOE IT AAOEAYEO

\\ aEDA OAITAEO

\\ EOOTUA AAAO

\\ \\ AUTEOIAE I OAAIEITA IAEI IAAA E OAAEAYEO AEIT DIAAAAEO PEDEEAE DAEI AATAEOE
OAI EAAEO OBI OE EAITIATAOI AA

\\ IAEI IAAA E OAAEAYEA -BUEOE IT IAAAA -EAEEO XAE OAAEEA EAAEO BAOTI DITA -EEI EOOE XAOITAOAAEO
EIAOEEAYEA -OAOAAAEO AITOAEEAAEO AAEOAOITA

\\ IAEI IAAA E OAAEAYEA -OAOAAEO AAEEITAAA -AIT-EO AAEEITAAA -AATAOAE EAAOEE aEDI OEA -AITEA

\\ IAEI IAAA E OAAEAYEA -OAOAAAEO AITOAEEAAEO AAEOAOITA -EEI EOOE XAOITAOAAEO EIAOEEAYEA -AITEA

\\ IAEI IAAA E OAAEAYEA -XAOITAOAAEO OOE XAEAOEE OOE AIAEO AAAOAEA AEOE XAOEUE-BUEEO
EITAEAAA EAAEOO XAE OAAEEA EAAEO BAOTI DITA -aEDI OEA -OAOAAAEO AITOAEEAAEO AAEOAOITA

\\ \\ I OAAIEITA IAEI IAAA E OAAEAYEO IT DIAAAAEO IAOATEITUE IT IABEEAI AO

\\ ÈÈÌ ÈÒÒÈ ×ÀÒÌÀÌÒÀÀÈÒ ÒÈÈÈÀÒÒÈÈÈ ãÄÒ×ÀÀÈÒ ÀÒÒÀÒÌÌÀ ÀÈÒÒÈ×ÈÀÒÒÈ ãÄÒ×ÀÀ
\\ \\ ÀÈÒÈÌ ÌÀÌ ÀÀÌÀÈÈ
\\ \\ ÒÒÀÌÒÀÌÈÌÈÒÀÀÀ
\\ \\ ÈÈÌ ÈÒÒÈ ×ÀÒÌÀÌÒÀÀÈÒ ÀÒÒÈÀÀÝÈÀ

//// sasqeso qromosomebis araswor daTiSvasTan dakavSirebul ia
A hemofil ia
B hemofil ia
*X-trisomia
daunis daavadeba

//// D-trisomiis safuZvel ia
X-trisomia
XXI qromosomis trisomia
*XIII-XV qromosomis trisomia
XVII-XVIII qromosomis trisomia

//// daasaxel eT qromosomul i daavadeba
gentingtonis qorea
al kaptonuria
konis daavadeba
*daunis daavadeba

//// kl ainfel teris sindromis dros aRiniSneba
kargad ganviTarebul i muskul atura
*dagvianebul i spermatogenezi
pol idaqtli ia
hidrocefal ia

//// vis aqvs sasqeso qromatini`
SereSevski-terneris sindromis daavadebul T
daunis daavadebebiT sneul T
E-trisomi iT sneul T
*kl ainfel teris sindromiT daavadebul T

//// sasqeso qromosomebis araswor daTiSvasTan dakavSirebel ia
A hemofil ia
*SereSevski-terneris sindromi
daunis daavadeba
fenil ketonuria

//// daunis daavadebis sixSire dakavSirebul ia

*pirvel ad mSobiare dedis asakTan
mutagenebis moqmedebasTan
dedis rezus faqtorTan
mamis rezus faqtorTan

//// SereSevski-terneris sindromis dros
*avadmyofs aqvs X qromosoma Y qromosomis gareSe
avadmyofs aqvs erTi Y qromosoma X qromosomis gareSe
avadmyofs aqvs sami X qromosoma
avadmyofs aqvs sami X da erTi Y qromosoma

//// SereSevski-terneris sindroms axasiaTebis
sasqeso qromatinis arseboba somaturi uj redebis birTvSi
maskul inizeba
*kefidan mxrebisaken mimarTul i kanis naWi
mamakacis tipis sasqeso organoebi

//// dominanturi genebis saSual ebiT gadaecema
fenil ketonuria
B hemofil ia
*neirofibromatozi
A hemofil ia

//// dominanturi genebis saSual ebiT gadaecema
*msxvil i nawl avis pol ipozi
al binizmi
fenil ketonuria
hemofil ia

//// dominanturi genebis saSual ebiT gadaecema
A hemofil ia
al binizmi
*Tandayol il i kataraqta
astigmatizmi

//// dabal i taniTa da sxoul is araproporciul obiT xasiaTdeba
B-hemofil ia
neirofibromatozi
*aqondropl azia
al binizmi

//// sqesTan SeWidul i memkvidreobiTi daavadebebia

dal tonizmi
gentingtonis qorea
*A hemofil ia
aqondropl azia

//// sqesTan SeWidul i memkvidreobiTi daavadebaa
*B hemofil ia
gentigtonis qorea
aqondropl azia
fenil ketonuria

//// B-hemofil ia dakavSirebul ia%
fenil al anindehidroqsil azas nakl ebobasTan
transaminazebis nakl ebobasTan
*antihemofil uri gl obul inis deficitTan
transaminazebis deficitTan

//// daunis daavadebas axasiaTebis
al binizmi
*monRol oiduri Tval ebi
sisxl dena
maRal i intel eqti

//// sisxl denisadmi midrekil ebiT xasiaTdeba
fenil ketonuria
*A hemofil ia
aqondropl azia
al kaptonuria

//// reaqciul oba es aris organizmis
pasuxi gaRizianebase
dacvis unari
*reaqciis unari gaRizianebase
specifikuri reaqcia

//// el eqtrotravmisadmi rezistentobis momateba organizmis gadacivebis dros
aris
j gufuri reaqtiul obis gamovl ineba
saxeobrivi raeqtivl obis gamovl ineba
*individuri reaqtiul obis gamovl ineba
specifikuri reaqtiul obis gamovl ineba

//// axal Sobil i ar avaddeba wiTel aTi. es dakavSirebul ia
saxeobriv imunitetTan
*asakobriv reaqtiul obasTan
araspecificur imunitetTan
al ergiasTan

//// imuniteti miekuTvneba
araspecificur raqtiul obas
*specificur reaqtiul obas
j gufur reaqtiul obas
paTol ogiur reaqtiul obas

\\ \\ \\ \ O T I A E E A A A O E A A A A I A O E A A O E E
\\ \\ A E A O A E E O I A A E A O I O A A E E A A E O O X E A A A A A E A O A E E O D A E I X E A E I E T A E O O O O A A E A O E
\\ \\ A E A O A E E O E E O A T O E A E E E A A A I A O P I T A A E T A E O O A I Y E O A A A A A A O A I T X A O O T O E A I E I A O E
\\ \\ A E A O A E E O I A A E A O I O A A E E A A E O O X E A A A A A E A O A E E O D A E I O E I E O O O O A A E A O E
\\ \\ A E A O A E E O E E O A T O E A E E E A A A I E A A O A A A A A E A O A E E O I A A E A O I O A A E O B A O I T O I T E E

\\ \\ \\ A O I T O O E E A O E I E O D A E I A A T A E O U E I T T A B E E A I A O
\\ \\ A O I T O E I E A A E O D I A E A O E O A O A A A A E O A A A O A T O E A Y E A
\\ \\ X E E O A E O A O O A O E E O A E E A O A Y E A
\\ \\ A O E E O I A O Y A A T A B A O E O A I A A T E O E I A O E O I A A
\\ \\ A O I T O E I E A A E O A A X A O E I A A A

\\ \\ \\ A E A O A E O E E O A A O Y E A A E O E I O T O O E O O A A E A I T E Y A A O
\\ \\ A T O E O A A O E A A E O A I O A T O E A E E E A A O E E T E E I X I Y E O A A E O B A O I T O I T A O
\\ \\ A E A O A E E O I A A E A O I O A A E O A A I T U T X A O
\\ \\ D I A E A O E O A O A A A A E O A A A O A T O E A Y E A O
\\ \\ E I T B E A T A T O E O B A O I T O I T A O

\\ \\ \\ I O E D E O A E A O A E O E E O A A O Y E E O A O I O
\\ \\ A T O E A A T A T O E O A A O E E O E I T B E A O O E A O X E O O E O A A A A A A E I X E E A A O A A D I A E A O O A O A A A A E A
\\ \\ A T O E A A T A T O E O A A O E E O E I T B E A O O E X E O O E O A A A A O A I E A T A O A O A A A A E A A E A A B E O A E A
\\ \\ B A O I T E O T I A A A I O A A E E I T E A E O E O O E A T O E A A T A T O E O A A O E E O E I T B E A O O E , O I T A E E Y E E A O A A A O O I A E E A A O U E
\\ \\ B A O I T E O T I A A A O A T O E A E E E A A O E E T E E I X I Y E O A A E

\\ \\ \\ A O I T O O E E A O E I E O D A E I A A T A E O U E A O I T T A B E E A I A O
\\ \\ E T O B I O A A I T U T X E O A A P E E A O A A A A O I T O E I E A A E O O A O A A A A E O I E A O
\\ \\ A O I T O I O B A A E T E
\\ \\ E T O B I O O A E O A Y E E O O A I Y E O A A A A O I T O E I E A A E O O A O A A A A E O I E A O
\\ \\ A E O O A T E T E

//// uj redul al ergiul reaqciebs akuTvneben
I tipis al ergiul reaqciebs
II tipis al ergiul reaqciebs
III tipis al ergiul reaqciebs

*IVtipis al ergiul reaqciebs

//// IV tipis al ergiul reaqciebis meqanizmSi monawil eoben
neitrofil ebi
eriTroci tebi
*@gadatanis faqtori
Tromboci tebi

//// IV tipis al ergiul reaqciebs mi ekuTvneba
anafil aqsia
artusis fenomeni
kvinqes SeSupeba
* baqteriul i al ergia

//// III tipis al ergiul reaqciebs mi ekuTvneba
* Sratismieri daavadeba
WinWris cieba
tuberkul inuri reaqcia
anafil aqsia

//// III tipis al ergiul reaqciebs mi ekuTvneba
* gl omerul onefriti
baqteriul i al ergia
kvinqes SeSupeba
anafil aqsia

//// Sratismier daavadebas axasiaTebis
* saxsrebis SeSupeba
Tromboci tozi
hipokapnia
eriTroci tozi

//// Sratismieri daavadebis meqanizmSi monawil eobs
* precipitinebi
heparini
monoci tebi
hipokapnia

//// Sratismier daavadebas axasiaTebis
hipokapnia
* Cirqovani gamonayari
eriTroci tozi
SeSupeba

//// რომელია ალერგიული რეაქცია
Seiz ება განვითარდეს ალერგის ერთჯერადი
სეზონური გამო
არტურული ფენომენი
WinWrist ციება
* Scleroderma დაავადება
კვინკსი სეზონური

//// ერთგვარი გამონაყარის მექანიზმი
Scleroderma დაავადების დროს მონაწილეობს
heparin
hirsutism რეფლექსი
* histamine
adrenaline

//// დაახლოებით I ტიპის ალერგიული რეაქცია
autoallergy
კონტაქტური დერმატიტი
Scleroderma დაავადება
* კვინკსი სეზონური

//// დაახლოებით I ტიპის ალერგიული რეაქცია
* WinWrist ციება
cytotoxic რეაქცია
Scleroderma დაავადება
არტურული ფენომენი

//// bronchospasm ანაფილექსი
tuberculin რეაქცია
* bronchial asthma
bronchospasm
კონტაქტური დერმატიტი

//// II ტიპის ალერგიული რეაქცია
სიმთავარი როლს თამაშობს
სისხლში მოცირკულირებელი რეაგენები
პოქიერი უჯრედების დეგრადაცია
transplant rejection რეაქცია
* cytotoxicity

//// II ტიპის ალერგიული რეაქცია
სიმთავარი როლს თამაშობს
IgE
* complement system-ის აქტივაცია
serotonin
რეაგენები

//// autoimunuri daavadebebi viTardeba
* sakuTari antigenebisadmi tol erantobis moxsnisas
kompl ementis deficitisas
T-I imfocitebis deficitisas
eriTroci tebis dros

//// imunuri sistemisagan izol irebul i antigenebi imyofeba
sisxl Si
gul Si
Zvl is tvinSi
* farisebur j irkval Si

//// IV tipis al ergiul i reaqciebis meqanizmSi monawil eoben
neitrofil ebi
eriTroci tebi
* I imfokinebi
Tromboci tebi

//// IV tipis al ergiul i reaqciebs mi ekuTvneba
Sratismieri daavadeba
anafil aqsia
kvinkes SeSupeba
* kontaqturi dermatiti

//// III tipis al ergiul i reaqciebs mi ekuTvneba
* al ergiul i al veol iti
WinWris cieba
tuberkul inuri reaqcia
anafil aqsia

//// IV tipis al ergiul reaqciebs mi ekuTvneba%
anafil aqsia
* tuberkul inuri reaqcia
artusis fenomeni
overis fenomeni

//// Sratismier daavadebas axasiaTebis
* qavil i
hipokapnia
Cirqovani gamonayari
eriTroci tozi

//// II tipis al ergiul reaqciaSi mTavar rol s TamaSobs%
sisxl Si mocirkul ire reaginebi
poxieri uj redebis degranul acia
transpl antantis mocil ebis reaqcia
* autoal ergia

//// autoimunuri daavadebebi viTardeba
* farul i antigenuri substanciis demaskirebisas
kompl ementis deficitisas
T-I mfocitebis deficitisas
eriTrocitozis dros

//// imunuri sitemisagan izol irebul i antigenebi imyofeba
sisxl Si
gul Si
Zvl is tvinSi
* Tavis tvinSi

//// III tipis al ergiul i reaqciebi iwveven
metapl azias
sindaqtil ias
* qsovil is nekrozs
hemogl obinozebs

//// anafil aqsiuri Sokis meqanizmSi monawil eobs
Sinagani organoebis gl uvi kunTebis moduneba
arteriul i hipertenzia
* Sinagani organoebis gl uvi kunTebis SekumSva
sisxl ZarRvTa kedl is ganvl adobis Semcireba

//// III tipis al ergiul i reaqciebi iwveven
metapl azias
* anTebas
hemogl obinozebs
avTvi sebian simsi vnebs

//// bronqul i asTmis paTogenezSi monawil eobs
* I orwos gamoyofa bronqi ol ebis uj redebis mier
bradikinini
I orwos sekreciis Semcireba bronqi ol ebis uj redebis mier
neitrofil ebi

//// anafil aqsiuri Sokis meqanizmSi monawil eobs
Sinagani organoebis gl uvi kunTebis moduneba
arteriul i hipertenzia
* sisxl ZarRvTa kedl is ganvl adobis gazrda
sisxl ZarRvTa kedl is ganvl adobis Semcireba

//// anafil aqsiuri Sokis meqanizmSi monawil eobs
poxieri uj redebis pl azmireba
miocitebis moduneba
eriTrocitebis hemol izi
* IgE

//// anafil aqsiuri Sokis meqanizmSi monawil eobs
arteriebis tonusis momateba
portul i hipertenzia
arteriul i hipertenzia
* bronqospazmi

//// anafil aqsiuri Sokis meqanizmSi monawil eobs
* mikrocircul acii darRveva
arteriul i hipertenzia
aortis spazmi
fil tvis arteriis dil atacia

//// anafil aqsiuri Sokis meqanizmSi monawil eobs
bradikardia
arteriul i hipertenzia
* arteriul i hipotenzia
fil tvis arteriis dil atacia

////@gadatanis faqtors Seicaven
arasensibil izebul i T-l imfocitebi
bazofil ebi
* sensibil izebul i T-l imfocitebi
Trombocitebi

//// III tipis al ergiul reaqceibs mi ekuTvneba
* al ergiul i al veol iti
WinWris cieba
revmatoidul i arTriti
tuberkul inuri sinji

\\ \\ \\ OÀ ÁÀŦÓáÀÀÀÀÀÀÀÀ ÀÉÓáÈĤÁÓÙÁÉÓ ÓÁŦÁÈÓÓÓÙÉ ÓÉÓáÈÉÓ ÈŦ ÁÀÓÈÁŸÉÉÓ ÚÁÀÀÀÀÀÀ ÀÁÓŦŦ ØŦŦÉÈ ŦÁÓÁÓ ÁÁ ÈÓŦ ŦÁÓ ÓŦ ÓÉÓ?

\\ \\ \\ ÈÓŦ ŦÁÉÓ ÀÁÓŦŦ ØŦŦÁ ŦáŦ ÈŦ Á ÓÉÓáÈÉÓ ÚÁÀÀÀÀÀÉÓ ÚÁÀÀÀÉÁ
\\ \\ \\ ÈÓŦ ŦÁÉ ÈÁÉÉÓÓ×ÈÁÀÁÁ ŦŦ ÈÁÁÓÁÁÓÈÉ ÓÉÓáÈĤÁÓÙÁÉÓ ÓÁŦÁÈÓÓÓÙÉ
\\ \\ \\ ÈÓŦ ŦÁÉÓ ÀÁÓŦŦ ØŦŦÁÙÉ ÁÓ ŦŦ ŦÁĤÉÈÁŦ ÁÓ ÓÉÓáÈĤÁÓÙÁÉÓ ÈÁÀÁÈÈ
ÁÁ ÓÉÓáÈÉÓ ×Ŧ ÓŦÈÁŦÈ ÁÈÁŦÁŦÓÁÁÈ
\\ \\ \\ ÈŦ ÁÀÓÈÁŸÉÓÓÈ ŦÁÓÁ ÁÓ ÁÓÈÓ ×ÈØÓÈÓÁÁÓÈÈ ÓÉÓáÈĤÁÓÙÁÉÓ ÈÁÀÁÈÈÁŦ

\\ \\ \\ ÁÓÈÈÓŦ ŸÉÓÁÁÉÓ ÓÉÓáÈĤÁÓÙÁÉÓÁÁ ÁÁÓÁÁÁŸÉÁ ÁÁÈÁÁÓÙÉÓÁÁÓÈÈÁ
\\ \\ \\ ÁÈÁÓŦÈŦÁÁÉÓ ÈŦ ŦŸÁŦÓÓÁŸÉÉÓ ŦŦ ŦÁÓÁÁÁÓÈÁŦ ÓÉÓáÈÉÓÈ
\\ \\ \\ ÓÉÓáÈÉÓ ŦÁÈÁÁÉÓ ÒÓ×ÈÁÈ ÓÈÙØÁÓÈÓ ÚÁŦŸÉÓÁÁÁÓÈÁŦ
\\ \\ \\ ÁÈŦ ÁÓÈÈŦÁÁÉÓ ÈŦ ŦŸÁŦÓÓÁŸÉÉÓ ÚÁŦŸÉÓÁÁÁÓÈÁŦ ÓÉÓáÈÉÓÈ
\\ \\ \\ áÈØŦ ×ÈÁÓÈŦŦ ÁÁŦÈÁÓÈÁŦ

\\ \\ \\ áÁÓŦŦÁÓÈÓÈÈ ÈÁĤÈÈ ÁÓÓÈÈÈ ÓÓÁÈÉÓ ŦÈÆÁÆÈÁ
\\ \\ \\ ŦÈÁÁÁÁÁÈ ÁÓÓÁÓÈÉÓ ØĤÁÆŦÈ
\\ \\ \\ ÁÓÈÈÓŦ ŸÉÓÁÁÉÓ ÁÁÓÁÁÁŸÉÁ
\\ \\ \\ ÁÁŦÁÁÉÓ ÈÓŦ ŦÁŦ ÁÈÈ
\\ \\ \\ ŦÈÁÁÁÁÁÈ ÁÓÓÁÓÈÉÓ ÈÓŦ ŦÁŦ ÁÈÈ

\\ \\ \\ ÈÓŦ ŦÁÀÁÓŦŦ ØŦŦÉÓ ØÓŦ ŸÁÓÓÈÈ ŦŦ ŦÁĤÉÈÁŦ ÁÓ
\\ \\ \\ ÈÓÈÓÓŦÁÓÈÓ ×ÁØÓŦŦ ÓÈÈ
\\ \\ \\ ×ÈÁÓÈŦŦ ÈÈÆÈÓ ÁÁĤÈÈÁÓÁÁÁ
\\ \\ \\ ÓÉÓáÈÉÓ ÒÓ×ÈÁÈ ÓÈÙØÁÓÈÓ ŦŦ ŦÁÓÁÁÁ
\\ \\ \\ ØÓŦ ÓÓÁŸÉÈÈÈÈÈÈÈ ÁÁŦŦ ÚŦŦ ×ÈÓ ŦŦ ŦÁÓÁÁÁ

//// isqemi uri stazis mizezia
qsovil idan sisxl is gadatanis dabrkol eba
mkvebavi arteriis gafarToeba
* mkvebavi arteriis kompresia
sisxl is homogeni zeba

//// Segubebi Ti stazis uSual o mizezia
*venebis kompresia
eriTroci tebis agregacia
mkvebavi arteriis spazmi
arteriis Trombozi

//// WeSmariti kapil arul i stazis mizezia
mkvebavi arteriis spazmi
*eriTroci tebis agregacia
venebis Trombozi
mkvebavi arteriis Trombozi

//// ra gansxvavebaa sisxl ZarRvis sanaTurSi sisxl is koagul aciis Sedegad
warmoqmnil masas da Trobozs Soris`

*Trombi warmoiqmneba sicocxl eSive
koagul aciuri masa warmoiqmneba sicocxl eSive
Trombi fiqsirebul i ar aris sisxl ZarRvis kedel ze
koagul aciuri masa fiqsirebul ia sisxl ZarRvis kedel ze

//// ra gansxvavebaa sisxl ZarRvis sanaTurSi sisxl is koagul aciis Sedegad
warmoqmnil masas da Trombs Soris`

*Trombis warmoqmnaSi aucil ebl ad monawil eobs sisxl ZarRvis kedel i da sisxl is
formiani el ementebi
Trombis warmoqmna mxol od sisxl is Sededebis Sedegia
Trombi Tavisufl adl aa moTavsebul i sisxl ZarRvis sanaTurSi
koagul aciuri masa fiqsirebul ia sisxl ZarRvis kedel ze

//// eriTroci tebis sisxl ZarRvSiga agregacia dakavSirebul ia
*sisxl is nakadis wrfivi siCqaris SemicirebasTan
al buminebis koncentraciis momatebasTan sisxl Si
gl obul inebis koncentraciis SemicirebasTan sisxl Si
hipofibrinogemiasTan

//// Trombis warmoqmnaSi monawil eobs
sisxl is turbul enturi nakadis Secvl a l aminarul iT
*sisxl ZarRvis kedl is dazianeba
fibrinol izis aqtivacia
eriTroci tebis defici ti

//// eriTroci tebis sisxl ZarRvSiga agregacia dakavSirebul ia
fibrinogenis koncentraciis SemicirebasTan sisxl Si
*eriTroci tis membranis muxtis cvl il ebasTan
sisxl is nakadis wrfivi siCqaris momatebasTan
gl obul inebis koncentraciis SemicirebasTan sisxl Si

//// Trombis warmoqmnaSi monawil eobs
*sisxl is l aminarul i nakadis Secvl a turbul enturiT
fibrinol izis aqtivacia
sisxl ZarRvis endoTel is mier prostacikl inis Warbi gamoyofa
sisxl is nakadis wrfivi siCqaris momateba

//// disemini rebul i sisxl ZarRvSiga koagul aciis meqanizmSi monawil eobs
*@moxmarebis koagul opaTia
heparinis defici ti
eriTroci tozi
l eikoci tebis emigracia

//// ratom aris xSiri mcire wris Tromboembol ia`

fil tvis sisxl ZarRvebis xSiri Trombirebis gamo
fil tvebis emfizemis gamo
*qvemo kidurebis venebSi arasrul yofil i Trombis xSirad gaCenis gamo
fil tvebis sisxl ZarRvebis kedl ebSi prostacikl inis maRal i Semcvel obis gamo

//// ras axasiaTebS Trombozis da sisxl denis erTdroul i ganviTareba`
miqsedemas
venur hiperemias
*diseminirebul sisxl ZarRvSi ga koagul acias
kesonis daavadebas

//// airovani embol ia SeiZl eba ganviTardes
mxuTavi airiT mowamvl isas
organizme maRal i temperaturis moqmedebis Sedegad
*anaerobul i gangrenis dros
aerobul i gangrenis dros

//// Trombwarmoqmnas ewi naaRmdegeba
I eikocitozi
*prostacikl ini
doqsacikl ini
cikli ofosfani

//// biol ogiuri agentebiT embol iam SeiZl eba gamoiwvios
*@spil os daavadeba
brinj aos daavadeba
Trombis moxvedra sisxl ZarRvebSi
fil tvis emfizema

//// diseminirebul i sisxl ZarRvSi ga koagul acia SeiZl eba gamoiwvios
eriTroci tozma
I eikocitebis emigraciam
*amnionis siTxiT embol iam
eozinofil ebis gaaqtivebam

//// Trombozis rogorma gamosaval ma SeiZl eba gamoiwvios mZime garTul eba
*Trombis mowvyetam
Trombis aseptikurma ganl evam
Trombis kanal izebam
Trombis organizebam

//// diseminirebul i sisxl ZarRvSi da koagul acia SeiZl eba gamoiwvios
eriTroci tozma
aneozinofil iam

*kapil arebis kedl is difuzurma dazianebam
venebis sarqvel ebis ukmarisobam

//// Trombis ConCxs Seadgens
fibrinogeni
*fibrinis bade
Trombinis bade
Trombasterini

//// Trombasteḡins gamoyofs
sisxl ZarRvis endoTel iumi
eriTroci tebi
*Tromboci tebi
I eikoci tebi

//// Trombwarmoqmni procesSi monawil eobs
*qsovil uri Trombopl astini
fibrinol izis gaZl iereba
sisxl is wrfivi siCqaris momateba
prostacikl inis gamoyofis momateba

//// Trombwarmoqmni procesSi monawil eobs
Sededebis Trombocitul i faqtorebis defici ti
*Sededebis qsovil uri faqtorebi
sisxl is turbul enturi nakadis Secvl a l aminarul iT
prostacikl inis gamoyofis momateba

//// Trombis sabol oo formirebaSi monawil eobs
Trombini
*Trombasterini
spil enZis ionebi
gl ukokinaza

//// isqemi is mi zezia
venebis gafarToeba
arteriebis gafarToeba
*arteriis spazmi
pasiuri kapil arebis gadasvl a aqtiur mdgomareobaSi

//// neirotonuḡi isqemia SeiZl eba ganviTardes
kapil arebis gafarTovebis gamo
vazodil atatorebis dambI is gamo
vazokonstriqtorebis dambI is gamo
*vazokonstriqtorebis gavl enis siWarbisas

//// isqemiis mizezia
*arteriis kompresia
venebis gafarToeba
arteriis gafarToeba
sisxl ZarRvis kedl is kunTovani el ementebis mgrZnobel obis daqvei Teba kumSvis
mastimul irebel faqtorTa mimarT

//// isqemiis dros
organo cianozurua
organo mowiTal o ferisaa
*viTardeba tkivil i
qsovil is temperatura momatebul ia

//// isqemiuri tkivil is meqanizmSi monawil eobs
qsovil is temperaturis momateba
nivTierebaTa cvl is gaZl iereba qsovil Si
*bradikinini
l imfocitebi

//// kompresiul isqemias iwvevs
arteriebis aTeroskl erozi
arteriis gafarToeba
*nawiburi
venebis gafarToeba

//// obturaciul isqemias iwvevs
nawiburis zewol a
emocia
tkivil i
*periarteriiti

//// obturaciul isqemias iwves
*embolia
arteriis gafarToeba
histamini
simsivnis zewol a

//// isqemiis Sedegi damokidebul ia
venebis saSual ebiT gatanil i sisxl is raodenobaze
*kol ateral uri sisxl is mimoqcevaze
Trombocitebis raodenobaze sisxl Si
eriTrocitebis dal eqvis siCqareze

//// neirotonul i isqemia SeiZl eba ganviTardes
eriTrocitozis gamo
arteriis kedl is miocitebis mgrZnobel obis daqveiTebis sas kumSvis
stimul atorebis mimarT
nawiburis zewol isas arteriaze
*emociebis gavl eniT

//// venuri hiperemiis ubanSi
Zl ierdeba qsovil is kveba
*mcirdeba qsovil is kveba
viTardeba hiperoqsia
viTardeba hipokapnia

//// isqemiuri stazis mizezia
qsovil idan sisxl is gadatanis dabrkol eba
eriTrocitebis agregacia
*mkvebavi arteriis spazmi
sisxl is homogenizeba

//// Trombist warmoqmnaSi monawil eobs
*sisxl ZarRvis kedl is muxtis cvl il eba
fibrinol izis aqtivacia
sisxl ZarRvis endoTel is mier prostacikl inis Warbi gamoyofa
sisxl is nakadis wrfivi siCqaris momateba

//// eriTrocitebis sisxl ZarRvSiga agregacia dakavSirebul ia
*eriTroctitis membranis cvl il ebasTan
al buminis koncentraciis momatebasTan sisxl Si
gl obul inebis koncentraciis SemcirebasTan sisxl Si
hipofibrinogemiasTan

//// diseminirebul i sisxl ZarRvSiga koagulacia SeiZl eba gamoiwvios
eriTroctoizma
*zogierTi gvel is Sxamma
eozinofil ebis gaaqtivebam
aneozinofil iam

//// Trombwarmoqmnis procesSi sisxl ZarRvis kedl is dazianebis rol i vl indeba
sisxl is turbulenturi dinebis Secvl iTI aminarul i dinebiT
*Tromboplastinis gamoyofis momatebiT
prostacikl inis gamoyofis momatebiT
Tromboplastinis gamoyofis SemcirebiT

//// Trombwarmoqmnis procesSi SeiZl eba monawil eobdes
prostacikl inis siWarbiT gamowweul i Trombocitebis agregacia
Trombopl astinis deficiTiT gamowweul i Trombocitebis agregacia
*prostacikl inis deficiTiT gamowweul i Trombocitebis agregacia
sisxl is turbul enturi dinebis gadasvl a l aminarul Si

//// isqemiis dros
organo cianozuria
organo mowiTal o ferisaa
*organo fermkrTal ia
qsovil is temperatura momatebul ia

//// kompresiul isqemias iwvevs
arteriebis aTeroskl erozi
*simsi vne
venebis gafarToeba
kapi arebis spazmi

//// isqemiis Sedegi damokidebul ia
venebis saSual ebiT gadatani l sisxl is raodenobaze
*isqemiis xangrZl ivobasa da xarisxze
l eikocitebis raodenobaze sisxl Si
eriTrocitebis dal eqvis siCqareze

//// neirotonul i isqemia SeiZl eba ganviTardes
arteriis kedl is miocitebis mgrZnobel obis daqvei Tebisas kumSvis
stimul atorebis mimarT
nawiburis zewol isas arteriaze
anTebis dros
*arteriebis kedl is miocitebis mgrZnobel obis momatebisas kumSvis
stimul atorebis mimarT

//// venuri hiperemiis Sedegad SeiZl eba Camoyal ibdes
organos hipertrofia
venebis spazmi
organos hiperpl azia
*cirozi

//// isqemiis mizezia
*arteriis embol ia
kapi arebis gafarToeba
qsovil idan sisxl is gatanis gaZl iereba
venebis gafarToeba

\\ ΑΑΕΙ ΔΟΑΟΕΙΕΟ ΑΑΙΤ ΥΙ ΧΕΟ ΤΙ ΤΑΟΑΑΑ
\\ \\ αΕΔΑΟΑΑΓΟΕΕΑΥΕΑ
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ΑΑΙΤ ΥΙ ΧΕΟ ΑΑΕΟΑΟΙΤΑΑ - ΑΓΟΕΑΕΟΟΑΕΟΕΕ αΙ ΟΤΙ ΤΕΟ αΕΔΑΟΘΟΙ ΑΟΘΥΕΑ - ΟΑΥΟΘΑΑΑ

/// wyl is fil tracia sisxl idan qsovil Si damokidebul ia
kol oidur-osmosur wnevaTa sxvaobaze sisxl sa da qsovil ur siTxeSi
*sisxl isa da qsovil ebis hidrodinamikur wnevaTa sxvaobaze
arteriul hipertenziaze
sisxl is fibrinol izur sistemaze

/// wyl is rezorbcia qsovil idan sisxl Si mcirdeba
sisxl is hidrodinamikuri wnevis daqveiTebisas
*qsovil ur siTxeSi natriumis koncentraciis momatebisas
qsovil ur siTxeSi cil is koncentraciis Semcirebisas
sisxl Si cil is koncentraciis momatebisas

/// wyl is fil tracia sisxl idan qsovil Si Zl ierdeba
sisxl is hidrodinamikuri wnevis daqveiTebisas
*sisxl is hidrodinamikuri wnevis momatebisas
qsovil uri sisxl is hidrodinamikuri wnevis momatebisas
natriumis koncentraciis Semcirebisas qsovil ur siTxeSi

/// wyl is rezorbcia qsovil uri siTxidan sisxl Si Zl ierdeba
sisxl is hidrodinamikuri wnevis momatebisas
*sisxl is kol oidur-osmosuri wnevis momatebisas
qsovil ur siTxeSi natriumis koncentraciis momatebisas
sisxl is hidrodinamikuri wnevis momatebisas

/// wyl is rezorbcia qsovil uri siTxidan sisxl Si Zl ierdeba
sisxl is hidrodinamikuri wnevis momatebisas
sisxl is hidrodinamikuri wnevis daqveiTebisas
sisxl is kol oidur-osmosuri wnevis daqveiTebisas
*sisxl is kol oidur-osmosuri wnevis momatebisas

//// wyl is fil tracia sisxl idan qsovil Si matul obs
isqemi is dros
Tirkml is mil akebis daziane bis dros
RviZl is daziane bis dros
*venuri Segubebis dros

//// wyl is rezorbcia qsovil idan sisxl Si Zl ierdeba
qsovil uri kol oidur-osmosuri wnevis momatebisas
sisxl is kol oidur-osmosuri wnevis daqvei Tebisas
* qsovil ur siTxeSi natriumis koncentraciis momatebisas
sisxl is hidrodinamikuri wnevis momatebisas

//// nefrozul i SeSupebis meqanizmSi monawil eobs
wyl is reabsorbciis Semicireba qsovil TaSua sivrcidan sisxl Si
*wyl is reabsorbciis Semicireba pirvel adi Sardidan
wyl is reabsorbciis gaZl iereba qsovil TaSua sivrcidan sisxl Si
sisxl is kol oidur-osmosuri wnevis momateba

//// nefritul i SeSupebis meqanizmSi monawil eobs
*hipernatriemia
meoradi hipoal desteronizmi
cil is gadasvl a qsovil TaSua sivrcidan sisxl Si
wyl is fil traciis momateba Tirkml is gorgl ebSi

//// nefrozul i SeSupeba vi Tardeba
Tirkml is gorgl ebis daziane bisas
gul is ukmarisobis dros
*Tirkml is mil akebis daziane bisas
SimSil is dros

//// nefritul i SeSupebis meqanizmSi monawil eobs
sisxl is kol oidur-osmosuri wnevis momateba
Tirkml is sisxl momaragebis zrda
*Tirkml is sisxl momaragebis daqvei Teba
wyl is reabsorbciis Semicireba kl aknil mil akebSi

//// kaxeqsiuri SeSupeba vi Tardeba
hiperproteinemi is dros
*SimSil is dros
Tirkml is gorgl ebis daziane bisas
hiperkateqol aminemi is dros

//// nefritul i SeSupebis meqanizmSi monawil eobs

wyl is fil traciis gazrda Tirkml is gorgl ebSi
*angiotenzin II
E prostagl andini
osmoreceptorebis gamoTiSva

//// nefrozul i SeSupebis meqanizmSi monawil eobs
*al buminuria
hiperproteinema
sisxl is hidrodinamikuri wnevis daqveiTeba
sisxl is kol oidur-osmosuri wnevis momateba

//// SeSupebis romel i saxe iwyeba Cveul ebriv qvemo ki durebidan`
nefritul i SeSupeba
nefrozul i SeSupeba
kvinqes SeSupeba
*kardiul i SeSupeba

\\\\ AA00A0E0E0E DE0I AAIE A0E0
\\ AAET 0I 00ETE
\\ 0I 00EE00E ATEIE
\\ AIAI 0I 00ETE
\\ AA00A0E0E DAET AAIOOI AEO AAITOAEUA0AEIE

\\\\ AIAI AAIOOE DE0I AAIEO PE0EEAAE BUAOI A
\\ AI AETI XEE
\\ DI AEAOE OAOAAE
\\ IAE0OI XEE
\\ EEIXI YEOE

//// cxel ebas iwvevs
sxel is temperaturis momateba kunTovani muSaobisas
sxel is temperaturis momateba siTbos gacemis dabrkol ebisas
*pirogenul i nivTierebebis moqmedeba Termoregul aciis centrze
Tavis tvinis gadaWra Termoregul aciis centris qvemoT

//// pirogenul i nivTierebebi
iwveven hiperTermias
aaqtiveben piroyurZnis mJavas
*iwveven cxel ebas
iwveven hipoTermias

//// egzogenuri pirogenul i nivTiereba
aris gl ikopol isaqaridi

*aris A I ipoidis Semicvel i I ipopol isaqaridi
aris A I ipoidis Semicvel i gl ikoproteini
toqsikuria

//// baqteriul i pirogeni
egzotoqsinia
*endotoqsinia
toqsikuria
dakavSirebul ia baqteriis paTogenurobasTan

//// endogenuri pirogenul i nivTierebebi produci rdebian
I imfocitebis mier
*hormonebis gavleniT
monocitebis mier
eozinofil ebis mier

//// I eikocituri pirogeni
moqmedebs ufro nel a, vidre egzogenuri pirogeni
xasiaTdeba saxeobrivi specifiurobiT
*Termolabiluria
Termostabiluria

//// I eikocituri pirogenis Termoregulaciis centrze moqmedebis meqanizmSi
monawilebs
*pirogenis moqmedeba neironis membranis specifikur receptorebze
guanilatcikliaza
protamini
histamini

//// TermomgrZnobiare receptorebi ganlagebul ia
ukana hipotalamusSi
varolisxidSi
oTxgorakSi
*wina hipotalamusSi

//// I eikocituri pirogenis mier gamowveuli cxel ebis meqanizmSi monawilebs
Termoregulaciis centris neironebis mgrZnobel obis momatebas iTburi signal ebis
mimarT
*Termoregulaciis centrის neironebis mgrZnobel obis momatebas iciviti
signal ebis mimarT
guanilatcikliaza
cikluri gmf

//// cxel ebis dros vitardeba

bradikardia
hipersalivacia
hipoventilacia
*hiposalivacia

\\\\ \u0391\u0395\u039e\u0391\u0395\u0395\u039e \u039e\u0391\u0399\u0395\u039e\u0391\u0391 \u0393\u0391\u0395\u0395\u0391\u0395\u0395 \u0399\u0391\u0399 \u039e\u0391 \u039e\u039e\u0391\u0395\u0395\u0395 \u0391\u0395\u0395\u0395\u0395\u0395\u0395 \u0395\u0395\u0395
\\\\ \u0391\u0395\u0395\u0395 \u0399\u0391\u039e\u039e\u0395\u0395\u0395\u0395\u0395\u0395\u0395\u0395
\\\\ \u0391\u0395\u0395\u0395 \u0391\u0395\u0395\u0395 \u039e\u039e\u0391\u0395\u0395\u0395 \u0399\u0391\u0395\u0395\u0395\u0395\u0395
\\\\ \u0391\u0395\u0395\u0395 \u0399\u0391\u039e\u039e\u0395\u0395\u0395\u0395\u0395\u0395\u0395\u0395
\\\\ \u0391\u0395\u0395\u0395 \u0395\u0395\u0395 \u0395\u0395\u0395\u0395\u0395\u0395\u0395\u0395

//// cxel eba vi Tardeba
Zl ieri ფიზიკური მუშაობის შედეგად
organizmdan siTbos gacemis SezRudvis gamo
organizmSi siTbos gaZl ierebul i produqciis gamo
* Termoregulaciis centrze pirogenul i nivTierebebis moqmedebi T

//// rogoria zogierTi hormonis mier gamowveul i cxel ebis meqanizmi
hormonebi uSual od aqtiveben adenil atcikl azas
*hormonebi aqveiteben Termoregulaciis centris mgrZnobel obas
hormonebi uSual od aqtiveben guanil atcikl azas
hormonebi Trgunaven adenil atcikl azas

//// sxელ is temperaturis awevis stadiaSi cxel ebis dros
izrdeba siTbos gacema
*mcirdeba siTbos gacema
mcirdeba Jangviti procesebis intensivoba
mcirdeba siTbos produqcia

//// siTbos gacemis Semcirebis meqanizmSi cxel ebis pirvel stadiaSi monawil eobs
periferiul i sisxl ZarRvebis gafarToeba
*periferiul i sisxl ZarRvebis Seviwroeba
kanis sisxl momaragebis zrda
siTbos produqciis gaZl iereba

//// romel i mtkicebaa marTebul i
cxel eba vi Tardeba organizmze maRal i temperaturis moqmedebis Sedegad
*cxel eba vi Tardeba organizmze pirogenul i nivTierebebis moqmedebis Sedegad
hiperTermiis dros Termoregulacia mimarTulia sxელ is temperaturis
momatebisaken
egzogenuri pirogeni Trgunavs endogenuri pirogenis warmoqmnas

//// cxel ebis dros
vi Tardeba hipoglikemia

pol iuria
hipertrofia
SemaerTebel qsovil ovani el ementebis ganl eva

//// anTebis adgil obrivi ni Snebia
cianozi
*tkivil i
temperaturis daqvei Teba
qsovil is turgoris daqvei Teba

//// anTebis adgil obrivi ni Snebia
*temperaturis momateba
temperaturis daqvei Teba
fermkrTal oba
qsovil is gamoSroba

//// anTebiTi siwiTI e
*mkveTradaa SemosazRvrul i
aradifuzuria
viTardeba qsovil is turgoris daqvei Tebis fonze
kompresiisas ar qreba

//// kapil arebis gafarToebis meqanizmSi anTebis dros monawil eobs
sisxl is nakadis wrfivi siCqaris momateba
sisxl is hidrodinamikuri wnevis Semcireba
*kapil arebis garemomcvel i SemaerTebel i qsovil is Wimvadobis momateba
kapil arebis garemomcvel i SemaerTebel i qsovil is drekadobis momateba

//// mikrohemocirkul aciis SesaZI ebel i darRvevebi anTebis ubanSi
arteriol ebis Seviwroveba
sisxl is nakadis wrfivi siCqaris momateba
postkapil arul i venebis konstriqcia
*mikrosisxl ZarRvebis Trombozi

////eqsudaciis meqanizmSi monawil eobs
sisxl is hidrodinamikuri wnevis daqvei Teba
*sisxl is hidrodinamikuri wnevis momateba
mikrosisxl ZarRvTa kedl is ganvl adobis Semcireba
sisxl is nakadis wrfivi siCqaris momateba

//// kapil arebis gafarToebis meqanizmSi anTebis dros monawil eobs
I izosomebis fermentebis inaqtivacia
prekapil arul i arteriebis Seviwroveba
*kapil arebis adventiciis meqanikuri Tvissebebis cvl il eba

winaaRmdegobis gazrda dil atirebul sisxl ZarRvSi

////kapiI arebis gafarToebis meqanizmSi anTebis dros monawil eobs
*anTebis mediatorebis gamoTavisufl eba
sisxl is hidrodinamikuri wnevis Semcireba
prekapiI arul i sisxl ZarRvebis Seviwroveba
winaaRmdegobis momateba dil atirebul sisxl ZarRvebSi

//// mwvave anTebis sawyis periodSi anTebiTi ubnis sisxl ZarRvebSi
izrdeba sisxl is wrfivi siCqare kapiI arebSi
*mcirdeba sisxl is xazovani siCqare kapiI arebSi
izrdeba winaaRmdegoba sisxl is nakadis mimaT
izrdeba sisxl is xazovani siCqare kapiI arebSi

//// eqsudatis dagrovebis meqanizmSi monawil eobs
*sisxl ZarRvTa kedl is ganvl adobis momateba
cil is koncentraciis Semcireba qsovil TaSua sivrcesi
sisxl is hidrodinamikuri wnevis Semcireba
eriTroci tebis hemol izi

//// serozul i eqsudati Seicavs
eriTroci tebs
*cil as
vazopresins
adrenal ins

//// anTebis dros mikrosisxl ZarRvTa ganvl adobis momatebis meqanizmSi
monawil eobs
*histamini
kompl ementi
guanil atcikli aza
adrenal ini

//// anTebis dros I eikocitebis emigraciis sawyisi etapi dakavSirebul ia
sisxl is hidrodinamikuri wnevis SemcirebasTan
*sisxl is nakadis wrfivi siCqaris SemcirebasTan
sisxl ZarRvTa sanaTuris SemcirebasTan
centridanul i Zal is momatebasTan sisxl ZarRvis sanaTurSi

//// eqsudaciis meqanizmSi monawil eobs
sisxl is mocul obiTi siCqaris Semcireba
*mikrosisxl ZarRvTa kedel Si forebis gaCena- gafarToebs
sisxl is hidrodinamikuri wnevis Semcireba

sisxl is nakadis wrfivi siCqaris momateba

//// anTebis dros procesis general izebis xel isSemSI el i meqanizmia
hipertrofia

sisxl is gatanis gaZl iereba venebis saSual ebiT

*I imfostazi

I imfopenia

//// anTebis dros procesis general izebis xel isSemSI el i faqtorebia

*sisxl ZarRvebis Trombozi

hipertrofia

toqsinebis gaTavisufli eba

arasrul i fagocitozi

//// anTebis dros procesis general izebis xel isSemSI el i faqtorebia

*granul aciuri qsovil iT SemosazRvra

arasrul i fagocitozi

adgil obrivi imunitetis Semcireba

adrenal inis siWarbe

//// aRniSneT anTebis dros ganviTarebul i zogadi movl enebi

*cxel eba

hipoTermia

eriTrocitozi

eds-is Semcireba

//// temperaturis momateba anTebis ubanSi dakavSirebul ia

*sisxl is modinebis gaZl ierebasTan

sisxl is modinebis SemcirebasTan

pirogenul i nivTierebebis moqmedebasTan

momtani sisxl ZarRvebis SeviwrovebasTan

//// prol iferaciul procesSi anTebis dros monawil eobs

*mezenqimuri uj redebi

arasrul i fagocitozi

adrenal ini

eriTrocitebi

//// prol iferaciul procesSi anTebis dros monawil eobs

eriTrocitebi

I imfocitebi

*adventiciuri uj redebi

bazofil ebi

//// anTebis gamosaval i SeIZI eba iyos
eds-is zrda
organos hipertrofia
cxel eba
*nawiburis gaCena

//// romel paTol ogiur process axasiaTebis arteriul i hiperemiis gadazrda
Sereul da venur hiperemi aSi
isqemias
SeSupebas
disemini rebul sisxl ZarRvSiga koagul acias
*anTebas

//// venuri hiperemiis ganviTarebis meqanizmSi anTebis dros monawil eobs
*eqsudatis zewol a venebze
sisxl is nakadis wrfivi siCqaris zrda
sisxl is nakadis mocul obiTi siCqaris zrda
sisxl is hidrodinamikuri wnevis Semcireba

//// riT aris pirobadebul i sisxl is nakadis siCqaris Semcireba miuxedavad
mocul obiTi siCqaris momatebisa anTebis dros
aqtiuri kapil arebis pasiur mdgomareobaSi gadasvl iT
kapil arebis spazmiT
*kapil arebis total uri gafarToebiT
venebis gafarTovebiT

//// anTebis uj redul i mediatorobia
*histamini
kalidini
bradikini
adrenalinini

//// anTebis pl azmuri mediatorobia
histamini
*bradikini
adrenalinini
serotonini

//// histamini Tavisufli deba
eriTroci tebidan
*poxieri uj redebidan
eozinofil ebidan
limfocitebidan

//// anTebis uj redul i mediatoria

*I imfokini
adrenal ini
bradikinini
kal idini

//// kini nebi

i wveven isqemias
zrdian hidrodinamikur wnevas
*zrdian mikrosisxl ZarRvTa kedl is ganvl adobas
i wveven l eikocitebis daSl as

//// prostagl andinebis warmoqmni s meqanizmSi anTebis dros monawil eobs

*fosfol ipaza
prostacikl ini
nikotinmJava
fosfataza

//// nawl avebSi naxSirwyl ebis Sewovis darRvevis mizezi SeiZl eba iyos

*enteriti
hiposal ivacia
gl ositi
heqsokinazas aqtivacia

//// ra SeiZl eba monawil eobdes nawl avebSi naxSirwyl ebis Sewovis darRvevis
meqanizmSi

*heqsokinazas bl okada
gastriti
heqsokinazas aqtivacia
hiposal ivacia

//// central uri warmoSobis hiperagl ikemiis dros gl ikogenol izis meqanizmSi
monawil eobs

insul inis hiperproduqcia
*adrenal inis gamoyofis momateba
vagusis gavl enis siWarbe
kuWis wwenis hipersekrecia

//// insul ini aaqtivebs

*naxSirwyl ebis fosforil ebas
gl ukokinazas
Tiroqsins
gl ukagons

\\ \text{E} \text{I} \text{O} \text{O} \text{E} \text{E} \text{I} \text{E} \text{O} \text{O} \text{E} \text{A} \text{O} \text{A} \text{E} \text{O} \text{A} \text{O} \\ \\ \text{a} \text{E} \text{D} \text{A} \text{O} \text{A} \text{A} \text{O} \text{A} \text{I} \text{A} \text{E} \text{E} \text{I} \text{A} \text{I} \text{E} \text{E} \text{O} \text{A} \text{O} \text{I} \text{O} \\ \\ \text{a} \text{E} \text{A} \text{O} \text{I} \text{E} \text{I} \text{O} \text{O} \text{E} \text{A} \text{I} \text{I} \text{E} \text{O} \text{A} \text{A} \times \text{E} \text{Y} \text{E} \text{O} \text{E} \text{O} \text{A} \text{O} \\ \\ \text{A} \text{E} \text{O} \text{E} \text{A} \text{A} \text{I} \text{I} \text{E} \text{O} \text{A} \text{A} \times \text{E} \text{Y} \text{E} \text{O} \text{E} \text{O} \text{A} \text{O}

\\ \\ \text{A} \text{A} \text{O} \text{A} \text{I} \text{A} \text{E} \text{E} \text{I} \text{O} \text{O} \text{E} \text{a} \text{E} \text{D} \text{A} \text{O} \text{A} \text{E} \text{E} \text{E} \text{A} \text{I} \text{E} \text{A} \text{A} \text{E} \text{A} \text{A} \text{O} \text{E} \text{O} \text{A} \text{A} \text{O} \text{E} \text{E} \text{A} \\ \\ \text{A} \text{E} \text{O} \text{E} \text{A} \text{A} \text{I} \text{I} \text{E} \text{O} \text{A} \text{A} \times \text{E} \text{Y} \text{E} \text{O} \text{E} \text{A} \text{I} \\ \\ \text{A} \text{E} \text{I} \text{O} \text{O} \text{A} \text{I} \text{E} \text{O} \text{A} \text{O} \text{E} \text{A} \text{A} \text{Y} \text{E} \text{A} \text{O} \text{E} \text{A} \text{I} \\ \\ \text{A} \text{E} \text{E} \text{E} \text{I} \text{A} \text{A} \text{I} \text{I} \text{E} \text{E} \text{A} \text{E} \text{A} \text{I} \\ \\ \times \text{E} \text{I} \text{O} \text{E} \text{P} \text{E} \text{I} \text{E} \text{O} \text{A} \text{E} \text{I} \text{E} \text{E} \text{O} \text{A} \text{A} \text{O} \text{E} \text{A} \text{I}

//// hiperglukemiavi Tardeba
*Tiroqsinis siWarbisas
kortikotropinis Semcirebisas
glukagonis Semcirebisas
Tiroqsinis deficitisas

//// glukozuria vi Tardeba
SaqrisTvis Tirkmlis zRurbls ar miRweul i hiperglukemiisas
glukagonis deficitisas
*SaqrisTvis Tirkmlis gadacil ebul i hiperglukemiisas
insulinis siWarbisas

//// ujrredis mierglukoziutilizebas xel s uwyobs
glukagoni
*insulini
adrenalini
alqساني

//// hiperglukemia axasiaTebis
*Saqriandiabets
uSaqro diabets
 α -glukozydazas deficitis
Tirkmlismier diabets

//// organizmis intoqsikacia dezaminirebis darRvevisas gamowveul ia
*biogenuriaminebis inaqtivaciis SeferxebiT
dekarboqsilirebis sisustiT
biogenuriaminebis aqtivaciiT
transminirebis gaZl irebeiT

//// dekarboqsilireba Zl ierdeba
*aminoqsidazebis aqtivobis daqvei Tebisas
dekarboqsilazebis inaqtivaciisas

hiperoqsiis dros
ami direbissas

//// cximis monel eba da Sewova irRveva
qol einatebis warmoqmniis gaZl ierebissas
E-avitaminozissas
*RviZl is dazianebyssas
nawl avis epiTel is funqciis aqtivaciissas

//// cximis monel eba da Sewova irRveva
wvriL i nawl avis epiTel is funqciis aqtivaciissas
qol einatebis warmoqmniis gaZl ierebissas
*nawl avSi pankreasiss wvenis gadasvl is darRvevissas
nikotinmJavas deficitissas

//// pirvel i organo, romel Sic xvdeba qil omikronebi, aris
RviZl i
Tirkmel i
pankreasi
*fil tvi

\\ \\ YáÉÍÉÓ ÌÌ ÍÄËÁÁÁ ÄÁ ÚÁBÍ ÄÄ ÉÒÙÁÁÁÁ
\\ ÍÁBËÁÁÙÉ ÍÁÚÁÉÉÓ ÁÁÁÁÓÁÉÉÓ ÚÁ×ÁÓÁÁÁÉÓÁÓ
\\ BÁÖÉÉÉ ÍÁBËÁÁÉÓ ÁDÉÉÁÉÉÓ ×ÓÍØÝÉÉÓ ÁØÖÉÁÁÝÉÉÓÁÓ
\\ ØÍ ÉÁÉÍÁÓÁÁÉÓ BAOÍÍ ØÍÍÉÓ ÁÁPÉÉÁÓÁÁÉÓÁÓ
\\ ÍÉÉÍ ÖÉÍÍÁÁÁÓ ÁÁ×ÉÝÉÖÉÓÁÓ

//// sisxl is qil omikronebi
*fiqsirdeba fil tvebSi
fiqsirdeba Tirkmel Si
fiqsirdeba RviZl Si
sinTezdeba Tirkml ebSi

//// I ipoproteidul i I ipaza
Tavisufli deba I eikocitebidan histaminis gavl eniT
*Tavisufli deba sisxl ZarRvis endoTel i umidan heparinis gavl eniT
Tavisufli deba sisxl ZarRvis endTel i umidan histaminis gavl eniT
Tavisufli deba eriTroci tebidan

//// retenciul i hiperI ipemia viTardeba
I ipoproteidul i I ipazas deficitissas
I ipoproteidul i I ipazas aqtivaciissas

cximiani sakvebis miRebisas
*nefrozis dros

//// ketonemia viTardeba
*Saqriani diabetis dros
pol iuriis dros
gl ikogenis siWarbisas
hiperproteinemiiis gamo

//// simsuqnis ganviTarebis paTogenezuri faqtorebia
*I ipocitebis siWarbe
depoebidan cximis mobil izebis gaZl iereba
anoreqsia
naxSirwyl ebidan cximis warmoqmniis darRveva

//// hipotal amuri simsuqnis paTogenezSi monawil eobs
madiis daqveiteba
*mazRrobis SegrZnebis gaqroba
pol idifsia
hipotal asusis ventromedial uri birTvebis gaRizianeba

//// memkvidruli faqtoris mniSvnel obas simsuqnisTvis gansazRvra
I ipol izis intensivoba
*I ipocitebis raodenoba
sisxl Si I ipidebis Semcvel oba
I ipoproteiduli I ipazas aqtivoba

//// simsuqnis ganviTarebis xel Semwyobi faqtorebia
anoreqsia
*naxSirwyl ebidan cximebis gaZl ierebul i warmoqmna
depoebidan cximis gamosvl is gaZl iereba
naxSirwyl ebidan cximis warmoqmniis darRveva

//// diencefal uri simsuqne viTardeba
Tavis tvinis garsebis anTebisas
*Tavis tvinis travmebisas
Tavis tvinis Seryevisas
Tavis tvinis isqemiisas

//// depoebidan cximis mobil izeba mcirdება
*hipofizis hipofunqciisas
aqil iis dros
hiperTireozis dros
simpatikuri nervuli sistemis agznebisas

//// avTvissebiani simsiwnis uj reds axasiaTebS
* destruqciul i zrda
gamravl ebis damuxruWebis unaris gaZl iereba
hipopl azia
eqspansiuri zrda

//// avTvissebiani simsiwnis uj redebis metastazirebis ZiriTadi gzaa
gadatana l eikocitebiT
gadatana eriTrocitebiT
hematogenuri
saWml is momnel ebel i traqtiT

//// romel i mtkicebul ebaa marTebul i
metastazi xSirad inarCunebs pirvel adi simsiwnis struqturas
metastazis uj redebi ufro diferencirebul ia, vidre pirvel adi simsiwnis
uj redebi
metastazis uj redebi xSirad ufro rTul i Senebisaa, vidre pirvel adi simsiwnis
uj redebi
* metastazis uj redebi xSirad funqciurad ufro nakl ebi simwi fisaa, vidre
pirvel adi simsiwnis uj redebi

//// romel i organos simsiwne metastazirebs mxol od organos fargl ebSi
RviZl is
kuWis
saTesl e j irkvl is
*Tavis tvinis

//// avTvissebiani simsiwnis uj redebSi
Semcirebul ia nukl einmJavebis sinTezi
*grovdeba rZemJava
gaZl ierebul ia pasteris efeqti
aerobul i gl ikol izi Warbobs anaerobul s

//// avTvissebiani simsiwnis uj redebSi
*gaZl ierebul ia nukl einmJavebis sinTezi
Semcirebul ia aminmJavebis aTvisseba
gaZl ierebul ia pasteris efeqti
aerobul i gl ikol izi Warbobs anaerobul s

//// avTvissebiani simsiwnis uj redebSi
Semcirebul ia nukl einmJavebis sinTezi
Semcirebul ia aminmJavebis aTvisseba
gaZl ierebul ia pasteris efeqti
*anaerobul i gl ikol izi Warbobs aerobul s

//// avTvi sebiani simsvnis uj redebSi
cil is daSI a Warbobs mis sinTezs
*cil is sinTezi Warbobs mis daSI as
naxSirwyl ebis moxmareba qveiTdeba
gaZI ierebul ia pasteris efeqti

//// kancerogenul i nivTier ebebi
Trgunaven erTmaneTis efeqts
spoben uj redebs
*moqmedeben uj redis genomze
ar arRveven qsovil ur sunTqvas

//// kancerogenul i nivTier ebebi
Trgunaven erTmaneTis efeqts
spoben simsvnis uj redebs
ar moqmedeben uj redis genomze
*moqmedeben imunur sistemaze

//// endogenuri kancerogenul i nivTier ebaa
histamini
heparini
*qol esterinis metabol itebi
bil irubini

\\ \\ aÉDÍ ØØÉÖØÉ aÉDÍ ØØÉÁ ÁÉÈÁØÃÁÁÁ
\\ \\ YÉÁÍÉÃÁÁÉÈ ÌÌ BÁÍÁÉÉØ ÁØÌ Ø
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\\ \\ ØÉÍÁÙÉÉØ ÁÁÁÁÁÁÁÉØ ÁØÌ Ø
\\ \\ ÁØÉÉØ ÁÁÉÌ ÌÐÁÍØÁÝÉÉØ ÁØÌ Ø

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\\ \\ ÐÍÁÁÌÌ ÈÌ ØÁØØÉØ ÁØÌ Ø
\\ \\ ÁÍÁÍÉÁÁÉØ ÁØÌ Ø

\\ \\ ØÁØÐÉØÁÝÉØÉÉ aÉDÍ ØØÉÁ ÁÉÈÁØÃÁÁÁ
\\ \\ YÉØÌ ØØÌ ÌÌ ØØÉÁÁÁÁÁÉØ ÁÉÌ ÉÉØÁÁÉØÁØ
\\ \\ ÌÉÉØ ÁÁÁÁÁÁÁÁÉØ ÁØÌ Ø
\\ \\ ×ÉÈØÁÉØ ÁÍÉÁÁÉØ ÁØÌ Ø
\\ \\ ÁØÉÉØ ÉØÌÙÁÁÁÌ ÁÉØ ÌÉÁÁÈØÉ ÁÁØÁÁÉÈÁÁÉØÁØ

\\ \\ YÉØÉØÉÁÝÉØØÉ aÉDÍ ØØÉÁ ÁÉÈÁØÃÁÁÁ
\\ \\ ÈÌ ÈÁ×ØÉØ ÁØÌ Ø
\\ \\ áÁÌÌ ÁÉÌ ÁÉÍÉØ ÁÁ×ÉÝÉØÉØÁØ

eriTropeniis dros
ciani debiT mowamvl is dros

hi poqsi uri hi poqsi a vi Tardeba
*mTis daavadebis dros
ciani debiT mowamvl is dros
eriTropeniis dros
gul is dekompensaciis dros

//// hi poqsi uri hi poqsi a vi Tardeba
brongospazmis dros
kateqol aminebis deficitis dros
dehidrogenazebis daTrgunvis dros
*CasunTqul haerSi Jangbadis deficitis dros

//// respiraciul i hi poqsi a vi Tardeba
*al veol uri ventil aciis darRvevisas
gul -sisxl ZarRvTa sistemis funciis darRvevisas
citoqromoqsidazebis bl okirebis dros
anemiebis dros

//// respiraciul i hi poqsi a vi Tardeba
mTis daavadebis dros
*fil tvebis SeSupebis dros
eriTropeniis dros
ciani debiT mowamvl is dros

//// respiraciul i hi poqsi a vi Tardeba
hemogl obinis deficitisas
mTis daavadebis dros
*pnevmoToraqsis dros
sunTqviTi fermentebis deficitis dros

//// respiraciul i hi poqsi a vi Tardeba
citoqromoqsidazebis bl okirebisas
*al veol ur-kapil arul i membranis ganvl adobis daqvei Tebis dros
mTis daavadebis dros
gul is kumSvadobis mkveTri daqvei Tebisas

//// respiraciul i hi poqsi a vi Tardeba
*brongospazmis dros
kateqol aminebis siWarbis dros
dehidrogenazebis daTrgunvis dros
CasunTqul haerSi Jangbadis deficitis dros

//// respirაციული იპოქსია ვითარდება
*პნევმონია დროს
გული და დეკომპენსაციის დროს
სასუნთქი ფუნქციის დეფიციტისას
კასუნთქული ჰერსი-ჯანგბადის პარციული იპოქსიის დაკვირვებას

//// ცირკული იპოქსია ვითარდება
ალვეოლური ვენიის დაკვირვებას
*გული-სისხლ-წარმოების სისტემის ფუნქციის დაკვირვებას
ციტოკრომ-ox-დაზების ბლოკების დროს
კასუნთქული ჰერსი-ჯანგბადის პარციული იპოქსიის დაკვირვებას

//// ცირკული იპოქსია ვითარდება
მთის დაავადების დროს
ფილტვების სეპსის დროს
ერიტროპენიის დროს
*გული და დეკომპენსაციის დროს

//// ცირკული იპოქსია ვითარდება
ჰემოგლობინის დეფიციტისას
მთის დაავადების დროს
*სოკის დროს
სასუნთქი ფუნქციის დეფიციტისას

//// ცირკული იპოქსია ვითარდება
ბრონქოსპაზმის დროს
*კატეგორიული დეფიციტისას
დეჰიდროგენების დატრუნვის დროს
კასუნთქული ჰერსი-ჯანგბადის დეფიციტისას

//// ცირკული იპოქსია ვითარდება
პნევმონია დროს
*გული და დეკომპენსაციის დროს
სასუნთქი ფუნქციის დეფიციტისას
კასუნთქული ჰერსი-ჯანგბადის პარციული იპოქსიის დაკვირვებას

//// ჰემური იპოქსია ვითარდება
ალვეოლური ვენიის დაკვირვებას
გული-სისხლ-წარმოების სისტემის ფუნქციის დაკვირვებას
ციტოკრომ-ox-დაზების ბლოკების დროს
*ანემიების დროს

//// hemuri hipoxia vi Tardeba
mTis daavadebis dros
fil tvebis SeSupebis dros
*eriTropeniis dros
cianidebiT mowamvl is dros

//// hemuri hipoxia vi Tardeba
*hemogl obinis deficitias
mTis daavadebis dros
Sokis dros
sasunTqi gzebis gamavl obis darRvevisas

//// hemuri hipoxia vi Tardeba
ci toqromoxsidazas bl okirebisas
al veol ur-kapil arul i membranis ganvl adobis daqveiTebis dros
mTis daavadebis dros
*meThemogl obinis Warbi warmoxmnis dros

//// hemuri hipoxia vi Tardeba
bronxospazmis dros
dehidrogenazebis daTrgunvis dros
CasunTqul i haerSi Jangbadis deficitias dros
*naxSirJangiT mowamvl is dros

//// sakompensacio meqanizmebi hipoxiis dros
fil tvebis ventilaciis daqveiTeba
sunTqvis gaiSviaTeba
eriTropenia
*fil tvebis ventilaciis momateba

//// sakompensacio meqanizmebi hipoxiis dros
fil tvebis ventilaciis daqveiTeba
sunTqvis gaiSviaTeba
eriTropenia
*eriTroci tozi

//// sakompensacio meqanizmebi hipoxiis dros
*sisxl idan Jangbadis utilizebis gaZl iereba
sisxl idan Jangbadis utilizaciis Semcireba
fil tvebis ventilaciis Semcireba
bradikardia

\\\\ \u041e\u0410\u0415\u0418 \u0418\u0414\u0410\u0418\u041e\u0410\u0415\u0418 \u0418\u0414\u0410\u0418\u0415\u0418 \u0410\u0415\u0418\u0418 \u041e\u0415\u0415\u0415 \u0410\u0418\u0418 \u0418

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//// sakompensacio meqanizmebis hipoksiis dros
*eritropoezis gazl iereba
sisxl idan Jangbadis util izebis Semcireba
fil tvebis ventil aciiis Semcireba
bradikardia

//// sakompensacio meqanizmebi mwvave hipoksiis dros
hipotenzia
hipoproteiniemi a
*deponirebul i sisxl is gamosvl a cirkul aciaSi
sisxl is deponireba

//// sakompensacio meqanizmebi mwvave hipoksiis dros
hipotenzia
bradipnoe
*taqikardia
sisxl is deponireba

//// sakompensacio meqanizmebi mwvave hipoksiis dros
gul is wutmocul obis Semcireba
*suntqvis gaxsireba
arteriul i hipotenzia
sisxl is deponireba

//// sakompensacio meqanizmebi mwvave hipoksiis dros
*sisxl is gadanawil eba sicocxl istvis didmniSnel ovani organoebisaken
sisxl is nakadis sicqaris Semcireba
bradikardia
aqtiuri kapil arebis gadasvl a pasiur mdgomareobaSi

////sakompensacio meqanizmebi mwvave hipoqsiis dros
sisxl is nakadis siCqaris Semcireba
bradikardia
aqtiuri kapil arebis gadasvl a pasiur mdgomareobaSi
*sisxl is nakadis siCqaris momateba

//// sakompensacio meqanizmebi hipoqsiis dros
fil tvebis ventil aciis Semcireba
*fil tvebis ventil aciis momateba
arteriul i hipotenzia
aerobul i gl ikol izis gaZl iereba

//// sakompensacio meqanizmebi hipoqsiis dros
arteriul i hipotenzia
fil tvebis ventil aciis Semcireba
*anaerobul i gl ikol izis gaZl iereba
sunTqviTi arITmia

//// ubral o hipovol emia viTardeba
sisxl is pl azmis mocul obis Semcirebis dros
sisxl Si eriTrocitebis raodenobis Semcirebis dros
hemogl obinis sinTezis darRvevis dros
*sisxl denis dros

//// pol icitemiuri hipovol emia SeiZl eba ganviTardes
sisxl denis dros
mTis daavadebis dros
*qol eris dros
eriTropoezis daTrgunvis dros

//// ol igocitemiuri hipovol emia viTardeba
qol eris dros
*anemiebis dros
damwvrobis dros
sisxl denis dros

//// ubral o hipervol emia SeiZl eba ganviTardes
damwvrobis dros
vakezis daavadebis dros
rezus-konfl iqtis dros
*sisxl is gadasxmis dros

\\ \ I' E' E' A' I' Y' E' O' A' I' E' O' O' E' a' E' D' I' A' I' E' A' I' E' A' A' E' E' A' O' A' A' A' A'
\\ \ O' E' O' a' E' E' O' D' E' A' A' E' I' E' O' T' I' Y' O' E' I' A' E' O' U' A' I' Y' E' O' A' A' E' O' A' O' I' O'
\\ \ O' E' O' a' E' U' E' A' O' E' E' O' I' Y' E' O' A' A' E' O' O' A' I' A' A' I' I' A' E' O' U' A' I' Y' E' O' A' A' E' O' A' O' I' O'
\\ \ a' A' I' I' A' E' I' A' E' I' E' O' O' E' I' E' A' A' E' O' A' A' O' U' A' A' A' E' O' A' O' I' O'
\\ \ O' E' O' a' E' A' A' I' E' O' A' O' I' O'

\\ \ D' I' E' E' Y' E' O' A' I' E' O' O' E' a' E' D' I' A' I' E' A' I' E' A' U' A' E' P' E' A' A' A' A' A' I' A' E' E' A' O' A' A' O'
\\ \ P' E' E' A' O' E' A' A' A' A' I' A' I' O' A' A' A' A' E' U' A' A' E' I' A' A' E' O' A' O'
\\ \ O' E' O' a' E' A' A' I' E' O' A' O' I' O'
\\ \ I' E' E' O' A' A' A' A' A' A' A' E' O' A' O' I' O'
\\ \ A' O' E' E' O' I' D' I' A' E' E' O' A' A' E' O' A' O' I' A' E' O' A' O' A' O' I' O'

\\ \ I' E' E' A' I' Y' E' O' A' I' E' O' O' E' a' E' D' I' A' I' E' A' I' E' A' A' E' E' A' O' A' A' A' A'
\\ \ O' I' E' A' O' E' O' A' O' I' O'
\\ \ A' A' I' B' A' O' I' A' E' O' A' O' I' O'
\\ \ A' O' E' E' O' I' D' I' A' E' E' O' A' A' E' O' A' O' I' A' E' O' A' O'
\\ \ O' E' O' a' E' A' A' I' E' O' A' O' I' O'

\\ \ D' I' E' E' Y' E' O' A' I' E' O' O' E' a' E' D' I' A' I' E' A' I' E' A' U' A' E' P' E' A' A' A' A' A' I' A' E' E' A' O' A' A' O'
\\ \ O' E' O' a' E' A' A' I' E' O' A' O' I' O'
\\ \ I' E' E' O' A' A' A' A' A' A' A' E' O' A' O' I' O'
\\ \ O' E' E' a' E' O' A' E' A' E' O' A' I' A' A' I' I' A' E' E' A' A' E' A' O' A' A' E' O' A' O' I' O'
\\ \ A' A' E' A' A' E' O' A' A' A' A' A' A' A' E' O' A' O' I' O'

\\ \ I' E' E' A' I' Y' E' O' A' I' E' O' O' E' a' E' D' I' A' I' E' A' I' E' A' A' E' E' A' O' A' A' A' A'
\\ \ O' I' E' A' O' E' O' A' O' I' O'
\\ \ A' O' E' E' O' I' Y' E' O' A' A' E' O' A' A' P' E' E' A' O' A' A' O' E' E' a' A' I' I' E' E' A' E' O' A' O' I' O'
\\ \ A' A' I' B' A' O' I' A' E' O' A' O' I' O'
\\ \ A' A' E' A' A' E' O' A' A' A' A' A' A' A' E' O' A' O' I' O'

\\ \ D' I' E' E' Y' E' O' A' I' E' O' O' E' a' E' D' A' O' A' I' E' A' I' E' A' U' A' E' P' E' A' A' A' A' A' I' A' E' E' A' O' A' A' O'
\\ \ E' A' O' I' I' E' O' A' A' A' A' A' A' A' E' O' A' O' I' O'
\\ \ A' O' E' E' O' A' I' E' E' O' A' O' I' O'
\\ \ a' A' I' I' E' E' A' E' O' O' E' A' I' A' I' E' A' A' E' O' A' O' I' O'
\\ \ A' A' I' B' A' O' I' A' E' O' A' O' I' O'

/// eri Trocitatebis axial gazrda formaa
nei trofil i
miel ociti
*retikul ociti
Sizociti

/// eri Trocitatebis axial gazrda formaa
bazofil i
eozinofil i
Sizociti
*poliqromatofil i

\\\\ ŌÉŌāĒŪÉ ŌĪ ĨĀĒĒ ŌāŌĀĀĀĀĒŌ ŌĀĪ ĀĀĪĪ ĀĒŌ ĨĪ ĨĀŌĀĀĀ ĨĒŌĒĒĒĀĀŌ ĀŌĒĒŌĪ ĐĪ ĀĒĒŌ ĀĀĐĒ ĒĀŌĀĀĀĒĀ
\\\\ ĨĀĀĀĒĪ ĨĒŌĀĀĒŌ
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\\\\ ĨĀĀĀĒĪ ĀĒĀŌŌĀĀĒŌ

//// eriTroci tebis moumwi febl obis ni Snebi a
Jol is sxeul akebis arseboba
kabos beWdebis arseboba
*pol iqromatofil ia
sferocitozi

//// eriTroci tebis moumwi febl obis ni Snebi a
kabos beWdis arseboba
marcvl ovneba
*birTvis arseboba
Jol is sxeul akebis arseboba

//// ra aris poikil oci tozi
axal gazrda eriTroci tebis arseboba sisxl Si
moberebul i eriTroci tebis arseboba sisxl Si
eriTroci tebis diametris Semcireba
*maxinj i formis eriTroci tebis gaCena

//// ra aris anizoci tozi
axal gazrda eriTroci tebis arseboba
eriTroci tebis diametris Semcireba
eriTroci tebis diametris gadideba
*sxvadasxva zomis eriTroci tebis arseboba sisxl Si

//// ra aris kabos beWedi
birTvis sxeul i naSTi
protopl azmis naSTi
*birTvis garsis naSTi
eriTroci tebis nagl ej ebi

//// ra aris Jol is sxeul aki
*birTvis sxeul is naSTi
protopl azmis naSTi
birTvis garsis naSTi
eriTroci tebis nagl ej ebi

//// ra apirobadebs pol iqromatofil ias
eriTroci tSi mxol od protopl azmis arseboba

eriTrociTsi mxol od birTvis arseboba
eriTrociTsi mxol od hemogl obinis arseboba
*eriTrociTsi protopl azmis, birTvisa da hemogl obinis arseboba

//// ra aris badisebri nivTiereba
eriTrociTis birTvis narCeni
protopl azmis cil ebis dal eqvis Sedegad miRebul i warmonaqmni gimza-romanovskis
wesiT SeRebvisas
*protopl azmis cil ebis dal eqvis Sedegad miRebul i warmonaqmni, miRebul i
supravital uri SeRebvisas
eriTrociTis nagl ej i

//// ra aris pol iqromatofil i
I eikocitis axal gazrda forma
*eriTrociTis axal gazrda forma
eriTrociTis paTol ogiuri forma
eriTrociTis degeneraciul i forma
//// swraf sakompensacio reaqciebs mwvave sisxl denis Semdeg mi ekuTvneba
parasimpaTikuri sistemis gavl enis siWarbe
*taqikardia
hipertenzia
eriTropoezis gaZl iereba

//// ra monawil eobs sisxl is wnevis aRdgenis meqanizmSi mwvave sisxl denis Semdeg
hemostazis daTrgunva
*periferiul i arteriebis Seviwroveba
periferiul i arteriebis gafarToebs
parasimpaTikuri nervul i sistemis gavl enis siWarbe

//// ra monawil eobs sisxl is wnevis aRdgenis meqanizmSi sisxl denis Semdeg
hemostazis daTrgunva
*taqikardia
periferiul i arteriebis gafarTovebs
bradikardia

\\\ ÒÀ ÌÌ ÍÁÈÉÀÌ ÁÓ ÓÉÓáÈÉÓ ßÍÁÁÉÓ ÁÛÁÁÁÍÉÓ ÌÁØÁÍÉÆÌÙÉ ÌßÁÁÁÁ ÓÉÓáÈÈÁÍÉÓ ÛÀÌÁÁÁ
\\\ ÁÁÒÌ ÒÁÝÁÐÒÌ ÒÁÁÉÓ ÁÁÆÍÁÁÁ
\\\ ×ÉÁÓÉÌÌ ÈÈÆÉÓ ÁØÓÈÁÁÝÈÁ
\\\ ÁÓÁÁÈÈÁÒÁÈÁ
\\\ ÒÁØÈÈÁÒÁÈÁ

\\\ ÁÁÛÌ ÁÍÁÁÓÈ ÓÁÈÌ ÌÐÁÌÓÁÝÈÌ ÒÁÁØÝÈÁÁÓ Ì ÈÈÁÁÌÈÈÓ ÁÒÌ Ó ÌÈÁÈÓÈÁÍÁÁÁ
\\\ ÁÓÈÌÁ
\\\ ÛÁÈÈÈÙÈ ÝÈÈÈÓ ÓÈÌÈÁÆÈÓ ÁÁÁØÓÈÁÁÁÁ

\\ \u041e\u041e\u0410\u0410\u0410\u0410\u0410\u0410\u0410 \u0410\u0410\u0410\u0410\u0410\u0410\u0410\u0410
\\ \u0414\u0410\u041e\u0410\u0410\u0410\u0410\u0410\u0410 \u041e\u041e\u0410\u0410\u0410\u0410\u0410\u0410 \u0410\u0410\u0410\u0410\u0410\u0410\u0410

/// dauyovnebel sakompensacio reaqlieds ol igemiis dros miekuTneba
*sunTqvis gaxSireba
fibrinol izis aqtivacia
sunTqvis gaiSviaTeba
hemostazis depresia

/// ra monawil eobs sisxl is wnevis aRdgenis meqanizmSi mwvave sisxl denis Semdeg
baroreceptorebis agzneba
fibrinol izis aqtivacia
*baroreceptorebis gamoTiSva
bradikardia

/// ra monawil eobs sisxl is wnevis aRdgenis meqanizmSi mwvave sisxl denis Semdeg
baroreceptorebis agzneba
fibrinol izis aqtivacia
*sisxl is pl azmis Sevseba qsovil uri siTxis xarj ze
bradikardia

/// qronikul i posthemoragiul i anemiebis dros sisxl Si gv xvdeba
*retikul ocitebi
megal obl astebi
megal ocitebi
I abrocitebi

/// qronikul i posthemoragiul i anemiis dros sisxl Si aris
hiperqromul i eriTrocitebi
megal obl astebi
megal ocitebi
*hipoqromul i eriTrocitebi

/// toqsikur-hemol izur anemiebs axasiaTebis
bl astozi
I eikopenia
megal obl astozi
*poikil ocitozi

/// toqsikur-hemol izuri anemia viTardeba

\\ ἈΟΕΕΟΙ ΥΕΘΑΕΟ ἈΑ×Ι ΟΙΑΥΕΟ ΟΓΑΟΕ ἈΘΑΑΕΕΑΑ

\\ \\ ΓΑΙΑΕΕΟΑΟΕ ΑΓΑΙΕΕΟ ἸΑΘΑΙΕΑΙΟΥΕ ἸΙ ΓΑΒΕΕΑΙ ΑΟ
\\ HBS-ΕΟ ἈΑΙΥ ΕΘΕΟΘΑΕΑΑ ἀΕΥΙ ΘΟΕΕΟ ΘΕΟΙ ΑΑΑΟΕ
\\ HBS-ΕΟ ΕΑΘΑΕ ἀΟΓΑΑΙ ΑΑ ΑΥΑΑΑΙΕΕ ἸΑΑΙ ἸΑΘΑΙ ΑΑΟΕ
\\ HBS-ΕΟ ἈΑΑΑΕΕ ἀΟΓΑΑΙ ΑΑ ἈΑΝΑΓΑΟΕ ἸΑΑΙ ἸΑΘΑΙ ΑΑΟΕ
\\ ἈΑΙΥ ἈΕΥΙ ΑΕΙΕΟ ΘΕΑΘΑΑ

\\ \\ ΓΑΙΑΕΕΟΑΑΟΘΕ ΑΓΑΙΕΕΟ ἈΟΙ Ο ΘΕΘΑΑΕ ΘΕΑΟΥ ΑΕΕΑΘΑΑΑ
\\ ΑΙΥ ΘΟΕΟΘΕ ἀΕΥΙ ΘΟΕΑ
\\ ἈΑΙΘΟΕ ἀΕΥΙ ΘΟΕΑ
\\ ΥΕΘΕΘΕΑΥΕΘΟΕ ἀΕΥΙ ΘΟΕΑ
\\ ΘΟΙ ΑΕΕΘΟΕ ἀΕΥΙ ΘΟΕΑ

\\ \\ ἸΕΓΕΙ ἈΟΕΕ-ΟΥΙ ×ΑΘΕΟ ἈΑΑΑΑἈΑΑΑΟ ἈΑΘΟΕΑΕΑΑΟ
\\ Ο×ΑΟΙ ΥΕΟΙ ΑΕ
\\ ΟΑΙΕΑΙΕΘΑΑΟΘΕ ἈΟΕΕΟΙ ΥΕΘΑΕΟ ἈΑΥΑΤΑ ΘΕΘΑΕΟΥΕ
\\ ΑΟΘΑΘΕΘΕΕ ἀΕΒΑΘΟΑΙΑΕΑ
\\ ΓΑΙΑΕΕΟΑΟΕ ἈΟΕΕΟΙ ΥΕΘΑΕΟ ἈΑΥΑΤΑ ΘΕΘΑΕΟΥΕ

\\ \\ ΟΑ ἸΙ ΓΑΒΕΕΑΙ ΑΟ ΑΘΕΕΕΘΟΕ ΑΓΑΙΕΕΟ ἸΑΘΑΙΕΑΙΟΥΕ
\\ B₁₂ ἈΕΘΑΙΕΓΕΟ ἈΑ×ΕΥΕΘΕ ΘΑΕΑΑΑΟΥΕ
\\ ΑΘΙ ΕΕΑ
\\ ΘΑΘΟΕΓΕ
\\ ΕΘΑΕΟ ΕΥΙ ΘΒΙ ἈΑΓΕΟ ΑΘΟΙ ×ΕΑ

\\ \\ ΟΑ ἸΙ ΓΑΒΕΕΑΙ ΑΟ ΑΘΕ ორჰიდრული ანემიის განვითარების მექანიზმში
\\ B₁₂ ἈΕΘΑΙΕΓΕΟ ἈΑ×ΕΥΕΘΕ
\\ ἸΘΑΕΑΙΘΕΑΤΕ ΘΕΕΓΕΟ ΟΑΙΑΑΕΑΙΘΕΑΤΑ ἈΑΘΑΑΘΙΓΕΟ ἈΑΘΥΑΑΑ
\\ ΑΘΙ ΕΕΑ
\\ ΘΕΕΓΕΟ ΘΑΒΙ ΑΕΘ ἈΑΘΥΑΑΑ

\\ \\ ἸΙ ἈΑΕΑΓΑΑΕΕΕ ΘΕΥΙ ΟΙ ΑΕ ΑΕΕΑΘΑΑΑ
\\ ΘΑΕΑΑΑΟΥΕ ΘΕΕΓΕΟ ἈΑ×ΕΥΕΘΕΟ ἈΑΙΥ
\\ ΘΑΘΘΑΟΙ ἈΥ ΟΙΥ ΓΑΑΕΟ ἈΕΘΑΑΕΑΓΘΕΟ ἈΑΙΥ
\\ ΕΘΑΕΟ ΒΑΑΥΕ ἸΑΘΕΕἸΝΑΑΑΟ ἈΑ×ΕΥΕΘΕΟ ἈΑΙΥ
\\ ἀΕΒΑΘΘΕΥΙ ΘΑΕΑΘΕΕΟ ἈΑΙΥ

\\ \\ naadre vi ΘΕΥΙ ΟΙ ΑΕ ΑΕΕΑΘΑΑΑ
\\ ΘΑΕΑΑΑΟΥΕ ΘΕΕΓΕΟ ἈΑ×ΕΥΕΘΕΟ ἈΑΙΥ
\\ sqesobrivi momwi febis asakSi
\\ ΕΘΑΕΟ ΒΑΑΥΕ ἸΑΘΕΕἸΝΑΑΑΟ ἈΑ×ΕΥΕΘΕΟ ἈΑΙΥ
\\ ἀΕΒΑΘΘΕΥΙ ΘΑΕΑΘΕΕΟ ἈΑΙΥ

\\ \\ ἈΑΕΟΙ Γ-ΑΕΘΙΑΘΕΟ ΑΓΑΙΕΕΟ ΟΑ×ΟΡΑΑΕΕΑ
\\ ΕΑΘΘΕΕΟ ΥΕΓΑΑΑΓΕ ×ΑΘΟΙ ΟΕΘ ἈΑ×ΕΥΕΘΕ
\\ ΥΕΑΓΕΙ ἈΑΕΑΙΕΓΕΟ ἈΑΑΙ ἈΑΙΘΟΕ ἈΑ×ΕΥΕΘΕ

\\ \AΘÉÍ ÒäÉĀÓÉĀ
\\ \ĬĀĒĒÍ ĬÉĬÉÓ ĀĀ×ÉÝÉÓÉ

\\ \B₁₂ ĀÉÓĀĬÉĬÉÓ ĀĀ×ÉÝÉÓÉÓ ĀÓÍ Ó ÉÓÚĀĀĀĀ
\\ \ÓĀÓÓĀĀäÉĀÓÍ ×Í ĒĬŊĀĀĀÓ ĀĀÓĀĀŊĬĬĀ ×Í ĒĒĬŊĀĀĀĀ
\\ \×Í ĒĒĬŊĀĀĀÓ ĀĀÓÉĀ
\\ \ŊÍ ĒĒĬÉÓ ÓÉĬÉĀĒÉ
\\ \ÓäŊĀĀĀĀÉÓ ĐŊÍ ĒÉ×ĀÓĀÝÉĀ

\\ \B₁₂ ĀĀÉÓĀĬÉĬÍ ĀÉÓ ĀÓÍ Ó äÉĐĀÓŊŊÍ ĬÉÉÓ ĬĀŊĀĬÉĀĬÉŊÉ ĬÍ ĬĀĐÉĒĀÍ ĀÓ
\\ \ÓĀÓÉÉÓÉÍ ÝÉÓÍ ĀÉ
\\ \ĬÉÉÓÍ ÝÉÓÍ ĀÉ
\\ \ĬĀĀĒÍ ÝÉÓÍ ĀÉ
\\ \ĬÍ ŊŊÍ ÝÉÓĀĀŊÉ äĀĬÍ ĀĒÍ ĀÉĬÉÓ Ó×ŊÍ ĬĀÓÉ ÚĀĬÝĀĒÉÍ ĀĀĀ ĀÉĀÓĀ ĬĀĀĒÍ ÝÉÓĀĀŊÉ

\\ \ŊÍ ĬĀĒÉ ĀĀĀĀĀĀĀĀ ÚĀÉĐÉ ĀĀĀ ĀĀĬĀĒÉĀÓĀĀÓ ÉÓäÉÓ ĒÍ ŊĐÍ ĀĀĬÉÓ ×ŊÍŊÝÉÉÓ ĀĀÓÚĀĀĀÉÓ ÚĀĀĀĀĀĀ
\\ \ĀÍ ŊŊÉÍ ÝĀ×ŊÉÉ ĀĬĀĬÉĀ
\\ \ĀĀÉÓÍ Ĭ-ĀÉŊĬĀÓÉÓ ĀĀĀĀĀĀĀĀ
\\ \ŊÍ ŊŊÉÉŊŊ-äĀĬÍ ĒÉĀŊŊŊÉ ĀĬĀĬÉĀ
\\ \äĀĬÍ ĒÉĀŊŊŊÉ ĀĬĀĬÉĀ

//// adison-birmeris anemiis safuZvel ia
ciankobal aminis egzogenuri deficiiti
aql orhidria
*gastromukoproteinis deficiiti
meTioninis deficiiti

//// adison-birmeris anemias axasiaTebs
mikroci tozi
hiperql orhidria
Trombozi
*sisxl warmoqmnis megal obl asturi tipi

//// adison-birmeris anemias axasiaTebs
mikroci tozi
hiperql orhidria
cianozi
*hunteris gl ositi

//// adison-birmeris anemias axasiaTebs
mikroci tozi
hiperql orhidria
cianozi
*funikul uri miel ozi

//// difil obotriul i da botrioceful i anemiis safuZvel ia
kasl is Sinagani faqtoris gamouyofl oba
ciankobal aminis al imenturi deficiiti
ciankobal aminis daSl a nawl avebSi
*Wiebis mier ciankobal aminis STanTqma

//// sprus axasiaTebS
*@TeTri# faRaraTi
yabzoba
hipogromia
retikul ocitozi

//// hipopl aziuri anemiebis dros
izrdeba Zvl is wiTel i tvinis masa
*mcirdeba uj redebis raodenoba Zvl is tvinSi
izrdeba megakariocitebis raodenoba
Cqardeba miel oiduri rigis uj redebis diferencireba

//// hipopl aziuri anemiebis dros
izrdeba Zvl is wiTel i tvinis mocul oba
*mcirdeba Zvl is wiTel i tvinis mocul oba
izrdeba megakariocitebis raodenoba
Cqardeba miel oiduri rigis uj redebis diferencireba

//// hipopl aziuri anemiis dros
edsi Semcirebul ia
*aRini Sneba panci topenia
viTardeba I eikobl astozi
viTardeba absol uturi I imfopenia

\\ \ aÉDÌ ÐÈÀÆÉÖÖÉ ÁÍÀÌÉÉÓ ÆÒÌ Ó
\\ \ ÁÁÓÉ ÚÀÌÝÉÒÁÁÓÉÉÁ
\\ \ ÁÉÈÀÓÁÁÁÁ ÈÁÉÈÌ ÁÈÀÓÓÌ ÆÉ
\\ \ ÁÉÈÀÓÁÁÁÁ ÁÁÓÌ ÈÓÓÓÓÉ ÈÈÌ×Ì ÐÁÍÉÁ
\\ \ ÁÚÉÍÉÚÁÁÁ ÈÒÌ ÍÀÌ ÝÉÒÌ ÐÁÍÉÁ

//// kompensaciuri eriTroci tozi viTardeba
vakezis daavadebis dros
I eikozebis dros
organizmis mier wyl is dakargvis dros
*maRal mTianeTSi

//// kompensaciuri eri Trocimotozi vi Tardeba
vakezis daavadebis dros
I eikozebis dros
organizmis mier wyl is dakargvis dros
*maRal mTianeTSi

//// kompensaciuri eri Trocimotozi vi Tardeba
vakezis daavadebis dros
I eikozebis dros
organizmis mier wyl is dakargvis dros
*hipoqsi is dros

//// kompensaciuri eri Trocimotozi vi Tardeba
vakezis daavadebis dros
I eikozebis dros
organizmis mier wyl is dakargvis dros
*gul -sisxl ZarRvTa sistemis ukmarisobisas

//// kompensaciuri eri Trocimotozi vi Tardeba
vakezis daavadebis dros
I eikozebis dros
organizmis mier wyl is dakargvis dros
*sasunTqi sistemis ukmarisobisas

//// paTol ogiuri eri Trocimotozi vi Tardeba
*vakezis daavadebis dros
I eikozebis dros
organizmis mier wyl is dakargvis dros
sasunTqi sistemis ukmarisobisas

//// sisxl is sibl artis zrda vakezis daavadebis dros xel s uwyobs
arteriul hipotenzias
*sisxl is nakadis siCqaris Semcirebas
amnezi as
hipovol emi as

//// sisxl is sibl artis zrda vakezis daavadebis dros xel s uwyobs
arteriul hipotenzias
*Trombozs
amnezi as
hiperproteini mi as

\\\\ AAÓÍ ÈÖÖÖÖÉ ÀÒÉÈÒÌ ÝÉÓÌ ÆÉ ÁÉÈÀÒÃÁÁ

//// დაასახელეთ ჰიპერკრომული ანემია
კრონიკული პოსთემორაგიული ანემია
*ორსულ ტამეგალი ასტური ანემია
კლიოროზი
ტალასემია

//// რომელ ანემიებს უდევს საფუძვლიდან ცვლილებები ჰემოგლობინის სტრუქტურაში
პერნიციოზული ანემია
მინკოვსკი-სოფარის დაავადება
კლიოროზი
*ნამგლი სეზური ანემია

//// რომელ ანემიებს უდევს საფუძვლიდან ცვლილებები ჰემოგლობინის სტრუქტურაში
პერნიციოზული ანემიას
ბოტრიოცეფული ანემიას
მინკოვსკი-სოფარის დაავადებას
*ტალასემიას

//// ჰემოლიზური ანემიის გამო შეიქმნება განვითარდეს
ამილიოიდი
ორგანოების ჰიპერტროფია
*სისხლძარღვების ტრომბოზი
პოლიციტემია

//// ჰემოლიზური ანემიის გამო შეიქმნება განვითარდეს
ამილიოიდი
ორგანოების ჰიპერტროფია
*ტროფიკული ულულეები
პოლიციტემია

//// ჰემოლიზური ანემიისას ვითარდება
ამილიოიდი
ორგანოების ჰიპერტროფია
*სიყვილი
პოლიციტემია

//// მემკვიდრული ჰემოლიზური ანემიებს მიეკუთვნება
პოსთემორაგიული ანემია
ანემია ნეფროპათიების დროს
*ჰემოგლობინოპათიები
კლიოროზი

//// მემკვიდრული ჰემოლიზური ანემიებს მიეკუთვნება

posthemoragiul i anemia
anemia nefropatiēbis dros
*enzimopatiā
ql orozebi

//// eritrocitopatiēbs miekuvneba
*minkovski-Sofaris daavadeba
namgl iseburi anemia
ql orozi
Tal asema

//// hemogl obinopatiēbs miekuvneba
mikrosferocitul i anemia
*Tal asema
posthemoragiul i anemia
gl uko-6-fosfatdehidrogenazul i anemia

//// hemogl obinopatiēbs miekuvneba
mikrosferocitul i anemia
*namgl iseburi anemia
posthemoragiul i anemia
gl uko-6-fosfatdehidrogenazul i anemia

//// hemol izis meqanizmSi α -Tal asema dros monawil eobs
hemogl obinis j aWvebis sintezis darRveva
*Barts- hemogl obinis dal eqva precipitatis saxiT
eritrocitebis el astikurobis momateba
patologiuri S-hemogl obinis gamokristal eba

//// hipoksiis meqanizmSi β -Tal asema dros monawil eobs
*eritrocitebis hemol izi
hipokapnia
eritropoezis darRveva
antisxeul ebis gaCena sakutari eritrocitebis mimate

//// tipobriv rkinadeficitur anemias miekuvneba
namgl iseburi anemia
 α -Tal asema
vakezis daavadeba
*aql orhidriul i anemia

//// tipobriv rkinadeficitur anemias miekuvneba
namgl iseburi anemia

α -Tal asema
vakezis daavadeba
*ql orozi

//// rkinadeficituri anemiebis dros viTardeba
respiraciul i hipoqsia sunTqvis darRvevis gamo
*hemuri hipoqsia hemogl obinis deficitis gamo
SegubebiTi hipoqsia
anoqsiuri hipoqsia garemoSi Jangbadis deficitis gamo

//// mogvianebiTi ql orozi viTardeba
sakvebSi rkinis deficitis gamo
kuWis wvenSi maril mJavas deficitis gamo
hiperql orhidriis gamo
*sakvercxeebis funqciis cvl il ebis gamo

//// ql orozis dros sisxl Si aRiniSneba
hiperqromul i eriTroci tebi
megal obl astebi
*mikroci tebi
I eikobl astebi

//// iuveniI uri ql orozis dros aRiniSneba
*dismenorea da amenorea
Sakiki
siyviTI e
bradikardia

//// aqil iuri anemia viTardeba
sakvebSi rkinis deficitis gamo
vitaminebis deficitis gamo
*kuWis wvenis gamouyofl obis gamo
kuWis wvenis mJavianobis momatebis gamo

//// ra monawil eobs aqil iuri anemiis meqanizmSi
B₁₂ vitamini deficitis
orval entiani rkinis samval entianad gardaqmnis darRveva
orval entiani rkina nawl avebSi ar Seiwoveba
*maril mJavas ararseboba kuWis wvenSi

//// vakezis daavadebas axasiaTebis
Trombopenia

euforia
I eikopenia
*Trombozi

//// vakezis daavadebas axasiaTebis
Trombopenia
I eikopenia
*sisxl Warboba
sisxl is nakdis siCqaris zrda

//// B₁₂ vitaminedificituri anemia viTardeba
cxel ebisas
aqol iis dros
*ankil ostomidozis dros
gastromukoproteinis siWarbisas

//// B₁₂ vitaminis deficiitis dros irRveva
tetradihidrofol is mJavas gardaqmna fol is mJavad
fol is mJavas sinTezi
qol inis sinTezi
*dnm-is sinTezi eriTro- da normobl astebSi

//// B₁₂ avitaminozs axasiaTebis
sisxl Si kabos sxeul akebiani eriTroci tebis ararseboba
sisxl Si sferocitebis arseboba
*megal ocitozi
sisxl Si Jol is beWdiani eriTroci tebis ararseboba

//// B₁₂-avitaminozs axasiaTebis
mikrocitozi
*hiperqromia
hipoqromia
I imfocitozi

//// B₁₂-avitaminozs axasiaTebis
mikrocitozi
*anizopoi kil ocitozi
hipoqromia
I imfocitozi

//// B₁₂-avitaminozs axasiaTebis
mikrocitozi
*megal obl astozi

hipogromia
limfocitozi

//// B₁₂ avitaminozis dros hiperogromiis meqanizmSi monawil eobs
retikulocitozi
mikrocitozi
*megalocitobSi hemoglobobinis ufro meti Semcvel oba, vidre normocitobSi
normocitobSi hemoglobobinis ufro meti Semcvel oba, vidre megalocitobSi

//// B₁₂ vitamindeficitur anemiabs miekuTvneba
aqlorhidriuli anemia
mikrosferocituli anemia
Tal asema
*agastriuli perniciozuli anemia

//// B₁₂ vitamindeficitur anemiabs miekuTvneba
aqlorhidriuli anemia
mikrosferocituli anemia
Tal asema
*botriocefuli da difilobotriuli anemia

//// B₁₂ vitamindeficitur anemiabs miekuTvneba
aqlorhidriuli anemia
mikrosferocituli anemia
Tal asema
*sprusTanmxlebi anemia

//// B₁₂ vitamindeficitur anemiabs miekuTvneba
Tal asema
*adison-birmeris daavadeba
mikrosferocituli anemia
aqlorhidriuli anemia

//// Ieikocituri formulis marcxniv gadaxragul isxmobs
limfocitebis raodenobis momatebas
monocitebis raodenobis momatebas
*axalgazrda neitrofilebis raodenobis momatebas
segmentbirTviani neitrofilebis raodenobis momatebas

//// Ieikocituri formulis degeneraciul gadaxraze metyvel ebs
segmentbirTviani neitrofilebis arseboba sisxl Si
*Ieikocitebis citoplazmis vakuolizeba
limfocitozi
CxirbirTviani Ieikocitebis arseboba sisxl Si

//// neutrofilia vitardeba
limfadenozis dros
hiperglikemiis dros
*mwave Cirqovani anaTebebis dros
qronikul i infeqciebis dros

//// hiperqromulobis meqanizmSi B₁₂ vitamindeficituri anemiebis dros monawileobs
eriTropenia
hunteris gliositi
bazofilia
*megalocitozi

//// eozinofilia vitardeba
vakezis daavadebebis dros
limfadenozis dros
sisxl denis dros
*parazituli daavadebebisas

//// monocitozi vitardeba
mielozis dros
limfadenozis dros
vakezis daavadebis dros
*limfogramulomatozis dros

//// limfocitozi vitardeba
mielozis dros
menieris sindromis dros
mwave Cirqovani anaTebebis dros
*qronikul i infeqciuri sneulebebis dros

//// limfocitozi vitardeba
mielozis dros
mwave Cirqovani anaTebebis dros
alergiuli daavadebebis dros
*limfadenozis dros

//// hemolizuri anemia Seizleba ganvitardes
aqiliis dros
qlorozis dros

*eritrocitebis meqanikuri dazianebisas
rkinis deficitisas

//// eritrocitebis hemol izis meqanizmSi monawil eobs
fosfatebis Sesvl a eritrocitSi
kaliumis Sesvl a eritrocitSi
*wyl is Sesvl a eritrocitSi
wyl is gamosvl a eritrocitidan

//// eritrocitebis hemol izis meqanizmSi monawil eobs
eritrocitebis mier ormxriv Cazneqili formis miReba
hiperkateqol aminemia
eritrocitebis deformabel obis momateba
*eritrocitebis deformabel obis daqvei Teba

//// eritrocitebis hemol izis meqanizmSi monawil eobs
atf-s nakl eboba
*eritrocitebis Seferxeba el enTis kordebSi
fosfatebis Sesvl a eritrocitSi
mikrocitozi

//// namgli sebur anemias axasiaTebS
Trombocitozi
cianozi
I eikopenia
*siyvi Tle

//// namgli sebur anemias axasiaTebS
cianozi
*qronikuli hiqosia
I eikopenia
kanis muqi pigmentacia

//// namgli sebur anemias axasiaTebS
aritmia
sixli dena
sixli is Sededebis daqvei Teba
*gul is kunTis isqemia

//// namgli sebur anemias axasiaTebS
aritmia

sisxl dena
sisxl is Sededebis daqvei Teba
*Zvl ebis deformacia

//// hemol izuri anemiis SesaZl o mizezia
B₁₂ vitaminis deficiiti
*rezus-konfliqti
rkinis deficiiti
fol is mJavas deficiiti

//// hemosiderozi α -Tal asemiis dros dakavSirebul ia
B₁₂ avitaminozTan
samval entiani rkinis deficiitTan
aqiliasTan
*sisxl is pl azmaSi rkinis momatebasTan

//// Tal asemas axasiaTebis
sferocitozi
Wkuasustoba
namglisebri eriTroci tebis gaCena sisxl Si
*samizniseburi eriTroci tebis gaCena sisxl Si

//// simpato-adrenal uri sistemis gul ze da sisxl ZarRvebze moqmedebis meqanizmSi
monawileobs
insulini
angiotenzinaza
kinebi
* α -adrenoreceptorebi

//// arteriuli wnevis done uSual od damokidebul ia
venebis tonusze
kapilarebis ganvl adobaze
fosfolipazaze
*periferiuli arteriebis winaaRmdegobaze

//// arteriuli wnevis done damokidebul ia
venebis tonusze
kapilarebis ganvl adobaze
fosfolipazaze
*sisxl is sibl anteze

//// arteriul i wnevis done damokidebul ia
kapil arebis tonusze
hiperproteiniaze
fosfolipazaze
*marcxena parkuWis sistolis simZl avreze

//// arteriul i wneva did wreSi qveiTdeba
sisxl is nakadisadmi periferiul i winaarmdegobis momatebisas
marcxena parkuWis sistolis gaZl ierebisas
sisxl is siblantis momatebisas
*sisxl is nakadisadmi periferiul i winaarmdegobis Semcirebisas

//// arteriul i wneva did wreSi qveiTdeba
marcxena parkuWis sistolis gaZl ierebisas
marjvena parkuWis sistolis gaZl ierebisas
sisxl is siblantis momatebisas
*marcxena parkuWis sistolis Sesustebisas

//// daasaxel eT arteriul i wnevis regulaciaSi monawile nervul i warmonaqmni an
nivTiereba
*renini
kuWis weni
 β -gl obulinebi
Tavis tvinis Subl is wili

//// daasaxel eT arteriul i wnevis regulaciaSi monawile nervul i warmonaqmni an
nivTiereba
*parasimpatikuri nervul i sistema
kuWis weni
 α -gl obulinebi
Tavis tvinis Subl is wili

//// daasaxal eT arteriul i wnevis regulaciaSi monawile nervul i warmonaqmni an
nivTiereba
*baroreceptorebi
kuWis weni
 α -gl obulinebi
Tavis tvinis Subl is wili

//// meore xarixis atrioventrikuluri blokadis dros
parkuWebamde arwevs sinusis kvanZSi armocenebuli yovel i agzneba
atrioventrikuluri kvanZi dayovnebiT, magram mainc atarebs agznebis yvel atal Ras

atrioventrikul ur kvanZSi agznebis gatareba TandaTan yovndeba da gamvardeba
yovel i meore-mesame agzneba
*atrioventrikul ur kvanZSi yovndeba yovel i morigi cikli is Semdeg da gamovardeba
yovel i me-7-9 agzneba

//// marcxena parkuWis ukmarisoba iwvevs
cianozs
*Segubebas mcire wreSi
Segubebas did wreSi
arteriul hipertenzias

//// marj vena parkuWis ukmarisoba iwvevs
fermkrTal obas
cxel ebas
Segubebas mcire wreSi
*Segubebas did wreSi

//// marj vena parkuWis ukmarisoba iwvevs
fermkrTal obas
cxel ebas
Segubebas mcire wreSi
*cianozs

//// SedarebiTi bradikardia aris
bradikardia cxel ebis dros
taqikardia cxel ebis dros
gul i SekumSvebis da sxoul is temperaturis dissociacia hipoTermiis dros
*gul i SekumSvebis da sxoul is temperaturis dissociacia cxel ebis dros

//// kompensaciuri pauza axasiaTebis
winagul ovan eqstrasistol as
parkuWebis TrTol vas
*parkuWovan eqstrasistol as
atrioventrikul ur eqstrasistol as damatebiTi aRgznebis kerZis kvanZis zemo
nawil Si

//// kompensaciur reaqciebs gul is ukmarisobis dros miekuTvneba
miogenuri dil atacia
koronarospazmi
koronaroskl erozi
*miokardi umis kumSvadobis momateba

//// gul is gadatvirTvisas gazrdil i mocul obiT viTardeba

bradikardia
miokardis kumSvis cvl il ebebis homeometrul i meqanizmi
koronaroskl erozi
*tonogenuri dil atacia

//// riT aixsneba gul is sarqvel ebis ukmarisobis upiratesad ufro
keTil Tvisebiani mimdinareoba xvrel ebis stenoZTan SedarebiT`
miokardis hipertrofiis xarixiT
miogenuri dil ataci iT
kompensaciis homeometrul i meqanizmis CarTviT
*kompensaciis heterometrul i meqanizmis CarTviT

//// daasaxel eT kompensaciis ufro araxel sayrel i meqanizmebi energetikul i
Tval sazrisiT
kumSvis gaZl ierebis heterometrul i meqanizmi
miogenuri dil atacia
*kumSvis gaZl ierebis homeometrul i meqanizmi
tonogenuri dil atacia

//// hipertrofirebul i miokardis Taviseburebebia
energetikul i uzrunvel yofis adekvaturoba
sisxl momaragebis siWarbe
sisxl momaragebis adeqvaturoba
*miocitis masis zrda CamorCeba misi zedapiris farTobis zrda

//// gul is ukmarisobis gazrdil i mocul obiT gadatvirTvis gamo viTardeba
*aortis sarqvel ebis ukmarisobis dros
mitral uri stenoZis dros
mcire wris hipertenziis dros
aortis stenoZis dros

//// gul is ukmarisoba gazrdil i mocul obiT gadatvirTvis gamo viTardeba
gul is kameridan sisxl is gamotanisdmi winaaRmdegobis gazrdis gamo
didi wris hipertenziis dros
*mZime fizikuri muSaobis dros
aortis stenoZis dros

/// aortis sarqvel ebis ukmarisobis dros
matul obs diastol uri arteriul i wneva
mcirdeba pul suri wneva
*izrdeba pul suri wneva
qveiTdeba sistol uri arteriul i wneva

//// winaarmdegobis gazrda did wreSi iwvevs
marj vena parkuWis hipertrofiას
*marcxena parkuWis hipertrofiას
marj vena winagul is hipertrofiას
marj vena parkuWis dil atacias

//// winaarmdegobis gazrda mcire wreSi iwvevs
*marj vena parkuWis hipertrofiას
marcxena parkuWis hipertrofiას
marcxena winagul is hipertrofiას
marcxena parkuWis dil atacias

//// marcxena parkuWis hipertrofia vi Tardeba
miral uri stenozis dros
*hipertonul i daavadebis dros
samkaredi sarqvel i nakl ovanebis dros (pirvel adad)
orkaredi sarqvl is ukmarisobis dros (pirvel adad)

//// marj vena parkuWis hipertrofia vi Tardeba
*mitral uri stenozis dros
aortis sarqvel ebis ukmarisobis dros
samkaredi sarqvel is ukmarisobis dros
aortis stenozis dros

//// marcxena parkuWis hipertrofia vi Tardeba
*aortis stenozis dros
mitral uri stenozis dros
orkaredi sarqvel i ukmarisobis dros
fil tvis arteriis stenozis dros

//// kardiul i asTma vi Tardeba
*marcxena parkuWis mwvave ukmarisobis dros
marj vena parkuWis mwvave ukmarisobis dros
marj vena parkuWis qronikul i ukmarisobis dros
marj vena winagul is ukmarisobisas

//// gul is ukmarisoba iwvevs
al kal ozs
hipokapnias
gul is hipertrofiას
*acidozs

//// miokardiუმის არაკორონაროგენულ ი ნეკროზი vi Tardeba
gvirgvinovani sisxl is mimoqcevis darRvevisას
*kateqol aminebis gavl eniT

qol inesTerazas gavl eniT
atf-s gavl eniT

//// miokardis arakoronarogenul i nekrozi viTardeba
gvingvinovani sisxl is mimoqcevis darRvevisas
*kortizol isa da natriumis gavl eniT
kateqol aminebis simcirisas
qol inesTerazas gavl eniT

//// miokardiumis kateqol aminuri nekrozis paTogenezSi monawil eobs
koronarul i sisxl is mimoqcevis darRveva
miocitebis I ipiduri Sris cvl il ebebi
*miokardiumis moTxovnil ebis zrda Jangbadze
koronarodil atacia

//// ra monawil eobs sistol uri arteriul i wnevis momatebaSi aortis sarqvel ebis
ukmarisobis dros
sisxl is nakadisadmi periferiul i winaaRmdegobis momateba
*marcxena parkuWis sistol is gaZl iereba
sisxl is nakadisadmi periferiul i winaaRmdegobis Semcireba
sisxl is regurgitacia marcxena parkuWidan marcxena winagul Si

//// ra monawil eobs sistol uri arteriul i wnevis momatebaSi aortis sarqvel ebis
ukmarisobis dros
sisxl is nakadisadmi periferiul i winaaRmdegobis momateba
*sisxl is regurgitacia aortidan marcxena parkuWSi
sisxl is nakadisadmi periferiul i winaaRmdegobis Semcireba
sisxl is regurgitacia marcxena parkuWidan marcxena winagul Si

//// ra monawil eobs diastol uri arteriul i wnevis dacemaSi aortis sarqvel ebis
ukmarisobis dros
sisxl is nakadisadmi periferul i winaaRmdegobis momateba
marcxena parkuWis sistol is Sesustebe
*sisxl is regurgitacia aortidan marcxena parkuWSi
marcxena parkuWidan aortaSi sisxl is gadasrol is gaZnel eba

//// koronarul i sisxl is nakadis sidide uSual od damokidebul ia
sisxl is wnevaze fil tvis arteriaSi
*sisxl is wnevaze aortaSi
breinbrij is refl eqsze
sisxl is nakadis siCqareze did wreSi

//// ram SeiZl eba gamoiwvios koronarul i ukmarisoba
sisxl is wnevis dacemam fil tvis arteriaSi
gul is kunTis SekumSvam

kateqol aminebis deficiitma

*koronarospazmma

//// ram Seizl eba gamoiwvios koronarul i ukmarisoba

ql oris siWarbem

ql oris nakl ebobam

*koronarebis Trombozma

koronarebis gafarToebam

//// ram Seizl eba gamoiwvios koronarul i ukmarisoba

ql oris siWarbem

ql oris nakl ebobam

*aTeroskl erozma

koronarebis gafarToebam

//// renul i hipertenziis miReba Seizl eba

*Tirkml ebis arteriebis okl uziit

cal i Tirkml is arteriis okl uziit

Tirkml is arteriis okl uziit el entis amokvetis fonze

orive Tirkml is amokvetit

//// renul i hipertenziis miReba Seizl eba

*Tirkml is arteriis okl uziit meore Tirkml is amokvetis fonze

erTi Tirkml is arteriis okl uziit

Tirkml is arteriis okl uziit el entis amokvetis fonze

orive Tirkml is amokvetit

//// renul hipertenzias iwvevs

*wnevis dacema orive Tirkml is gorgl ebis kapil arebSi

wnevis momateba orive Tirkml is gorgl ebis kapil arebSi

wnevis dacema erTi Tirkml is gorgl is kapil arebSi

reninis deficiiti

//// baroreceptorebis agzneba

zrdis arteriul wnevas

*amcirebs arteriul wnevas

iwvevs taqikardias

iwvevs Soks

//// daasaxel eT arteriul i wnevis regul aciaSi monawil e nivTiereba

•azotis oqsidi

heparini

C-reaqtiul i cil a

CO

//// arteriul i sisxl is wneva matul obs maSin, rodesac
ifiteba α -adrenoreceptorebis funqcia
ifiteba gul is meqanoreceptorebis funqcia
*arteriebis kedl ebis α -adrenoreceptorebze kateqol aminebis moqmedebis efeqti
Warbobs β -adrenoreceptorebze moqmedebis efeqts
arteriebis kedl ebis β -adrenoreceptorebze kateqol aminebis moqmedebis efeqti
Warbobs α -adrenoreceptorebze moqmedebis efeqts

//// renovaskul uri hipertenzia cal i Tirkml is isqemiis dros ar viTardeba
reninis Warbi gamoyofis gamo saR Tirkmel Si
prostagl andin A da E-s gamoyofis Semicirebis gamo saR Tirkmel Si
angiotenzinazas Warbi gamoyofis gamo isqemiur Tirkmel Si
*angiotenzinazas Warbi gamoyofis gamo saR Tirkmel Si

//// ekg-s cvl il eba parkuWovani eqstrasistol is dros
dadebiTi P kbil i
*QRST kompl eqsis deformacia
dadebiTi R kbil i
eqstrasistol is Semdgomi T-P interval is Semicireba

//// ekg-s cvl il eba parkuWovani eqstrasistol is dros
dadebiTi P kbil i
dadebiTi R kbil i
P-Q interval is gaxangrZl iveba
*eqstrasistol is Semdgomi T-P interval is gaxangrZl iveba

//// ekg-s cvl il eba parkuWovani eqstrasistol is dros
dadebiTi P kbil i
*P kbil is ararseboba
dadebiTi R kbil i
eqstrasistol is Semdgomi T-P interval is Semicireba

//// eqstrasistol is wina da misi Semdgomi diastol is saerTo xangrZl ivoba udris
1,5 normal uri diastol is xangrZl ivobas
1 normal uri diastol is xangrZl ivobas
*2 normal uri diastol is xangrZl ivobas
3 normal uri diastol is xangrZl ivobas

//// pirvel i xarisxis arasrul i atrioventrikul uri bl okadis dros
parkuWebamde droul ad aRwevs sinusis kvanZSi aRmocenebul i yvel a impul si
atrioventrikul uri kvanZi ar atarebs yovel mexuTe-meeqvse impul ss
*atrioventrikul uri kvanZi atarebs yvel a impul ss, magram dayovnebi T
gaxangrZl ivebul i impul sis gatareba purkinies boWkoebSi

//// meore xarixsis atrioventrikul uri bl okadis dros
P-Q interval i TandaTanobiT mokl deba
P kbil i deFormirdeba
*P-Q interval i xangrZl ivdeba yovel i momdevno cikl is Semdeg meSvide-mecxre
parkuWovan cikl amde, romel ic gamovardeba
atrioventrikul uri kvanZi agznebas ar atarebs

//// pirvel i xarixsis atrioventrikul uri bl okadis dros
P kbil i deFormirebul ia
xangrZl ivdeba T-P interval i
mokl deba P-Q interval i
*xangrZl ivdeba P-Q interval i

//// mesame xarixsis atrioventrikul uri bl okadis dros
parkuWebamde aRwevs sinosis kvanZSi aRmocenebul i yvel a impul si
parkuWebamde ar aRwevs sinosis kvanZSi aRmocenebul i arc erTi impul si
agznebis gatareba atrioventrikul ur kvanZSi xangrZl ivdeba yovel i cikl is Semdeg
da gamovardeba yovel i meSvide-mecxre impul si
*agznebis gatareba atrioventrikul ur kvanZSi xangrZl ivdeba yovel i morigi
cikl is Semdeg da gamovardeba yovel i meore-mesame impul si

//// srul i atriventrikul uri bl okadis dros
*atriventrikul uri kvanZi ar atarebs arc erT impul ss
impul sis gavl a atrioventrikul ur kvanZSi gaxangrZl ivebul ia
impul sebis nawil i bl okirdeba atrioventrikul ur kvanZSi
viTardeba bradipnoe

//// srul i atriventrikul uri bl okadis dros
*viTardeba bradikardia
impul sis gavl a atrioventrikul ur kvanZSi gaxangrZl ivebul ia
impul sebis nawil i bl okirdeba atrioventrikul ur kvanZSi
viTardeba bradipnoe

//// srul i atrioventrikul uri bl okadis dros
*vl indeba bradikardia
pul si ariTmiul ia
winagul ebis SekumSva ariTmiul ia
parkuWebis SekumSvis sixSire metia winagul ebis SekumSvis sixSireze

//// bradikardia viTardeba
bradipnoes dros
mitral uri mankis dros
aortis sarqvel ebis ukmarisobis dros

*srul i atrioventrikul uri bl oakdis dros

//// bradikardia vi Tardeba

bradipnoes dros

mitral uri mankis dros

aortis sarqvel ebis ukmarisobis dros

*qal asSiga wnevis momatebis dros

//// srul iad qaosuri da araregul arul i parkuWebis SekumSvebi pul sis deficiTiT vl indeba

parkuWovani eqstrasistol is dros

bradikardiis dros

*winagul ebis TrTol vis dros

srul i ganivi bl okadis dros

//// parkuWebis srul iad qaosuri da araregul arul i SekumSvebi pul sis deficiTiT vl indeba

parkuWovani eqstrasistol is dros

bradikardiis dros

*winagul ebis cimcimis dros

srul i ganivi bl okadis dros

//// romel i avadmyofobis dros vi Tardeba mocimcime ariTmia ufro xSirad hipotonul i daavadeba

miqsedema

aortis sarqvel ebis ukmarisoba

*mitral uri stenozi

//// mocimcime ariTmia uxSiresad vi Tardeba

hipotonul i daavadebis dros

miqsedemis dros

aortis sarqvel ebis ukmarisobis dros

*Tireotoqsikozis dros

//// mocimcime ariTmia uxSiresad vi Tardeba

hipotonul i daavadebis dros

miqsedemis dros

aortis sarqvel ebis ukmarisobis dros

*kardioskl erozis dros

//// gul is ukmarisoba gazrdil i winaaRmdegobiT gadatvirTvis gamo vi Tardeba

gul is sarqvel ebis ukmarisobis dros

*gul is xvrel ebis stenoziis dros
mcire wris hipotenziis dros
did wreSi winaarMdegobis daqveiTebis dros

//// gul is ukmarisoba gazrdil i winaarMdegobiT gadatvirTvis gamo viTardeba
orkariani sarqvel is ukmarisobis dros
aortis sarqvel ebis ukmarisobis dros
did wreSi winaarMdegobis Semcirebis dros
*mitral uri stenoziis dros

//// marcxena parkuWis ukmarisoba iwvevs
gul is manks
Segubebas qvemo ki durebze
Segubebas did wreSi
*Segubebas mcire wreSi

//// marcxena parkuWis ukmarisoba iwvevs
bradi pnoes
cianozs
*qoSi ns
Segubebas did wreSi

//// marj vena parkuWis ukmarisoba iwvevs
fermkrTal obas
Segubebas mcire wreSi
gul is manks
*Segubebas did wreSi

//// gul is ukmarisoba iwvevs
sisxl is nakadis siCqaris momatebas
sisxl is masis Semcirebas
anemias
*sisxl is nakadis siCqaris Semcirebas

\\ \\ \\ \u00c0\u00d0\u00e0\u00e9\u00e9\u00e9 \u00c7\u00c0\u00c0 \u00c1\u00e9\u00c1 \u00c2\u00d0\u00d0\u00e9 \u00d0\u00c1\u00e9\u00e9\u00c1\u00c1\u00c1
\\ \\ \u00d0\u00c1\u00e9\u00d0\u00e9\u00e9\u00e9 \u00c0\u00d0\u00d0\u00e9\u00c1\u00e9\u00e9 \u00d0\u00c1\u00e9\u00d0\u00d0\u00c7 \u00c1\u00e9\u00d0\u00d0
\\ \u00d0\u00c1\u00e9\u00d0\u00e9\u00e9\u00e9 \u00c0\u00d0\u00d0\u00e9\u00c1\u00e9\u00e9 \u00c1\u00c1\u00d0\u00e9\u00c7 \u00c1\u00e9\u00d0\u00d0
\\ \\ \u00c7\u00d0\u00d0\u00c1\u00c1\u00c1 \u00d0\u00d0\u00e9\u00d0\u00e9\u00e9 \u00d0\u00e9\u00d0\u00c7 \u00e9\u00e9 \u00c1\u00c1\u00e9\u00e9\u00c1\u00c1\u00e9\u00d0\u00d0
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\\ \\ \\ ΑΓΑΕΤΙ ΟΑΓΑΕΓΕΘ ΘΕΘαΕ ΡΑΘΟΑΑΑΑΕΑ ΤΙ ΘΤΑΑΑΑΕΘ ΤΑΘΑΓΕΑΤΟΕ ΤΙ ΓΑΒΕΕΑΤΙ ΑΘ

\\ ΓΑΟΘΕΘΤΕΘ ΑΑ ΒΥΕΕΘ ΟΑΕΑΑΑΑ ΟΕΘαΕΡΑΘΟΥΑΕΘ ΕΑΑΑΕΘΕ
\\ \\ ΑΑαΕΑΘΑΘΑΥΕΑ
\\ \\ ΒΥΑΕΑΑΑΕΘ ΕΤ ΓΑΑΕΘ ΟΑΕΑΑΑΑ ΟΕΘαΕΡΑΘΟΥΑΕΘ ΕΑΑΑΕΘΕ
\\ \\ ΑΕ×Α-ΑΑΘΑΤΙ ΘΑΑΘΘΕΘΕΕ ΘΘΘΘΘΘΘΑΑΕΘ ×ΘΤΘΥΕΕΘ ΑΑΘΑΑΕΕΑΑΑ

///renul i hipertenziis meqanizmSi monawil eobs
*reninis hiperproduqcia
reninis defici ti
al dosteronis defici ti
A da E prostagl andinis siWarbe

///renul i hipertenziis meqanizmSi monawil eobs
*al dosteronis hiperproduqcia
reninis defici ti
al dosteronis defici ti
A da E prostagl andinis siWarbe

/// renul i hipertenziis meqanizmSi monawil eobs
*arteriebis kedl ebis gaj irj veba Na⁺ da H₂O dagrovebis gamo
reninis defici ti
arteriebis β-adrenoreceptorebis mgrZnobel obis momateba Na-s si sxl ZarRvis
kedl ebSi dagrovebis gamo
hiponatriemi a

/// renul i hipertenziis meqanizmSi monawil eobs
*arteriebis α-adrenoreceptorebis mgrZnobel obis momateba
reninis defici ti
arteriebis β-adrenoreceptorebis mgrZnobel obis momateba
angiotenzinazas hiperproduqcia

/// renul i hipertenziis meqanizmSi monawil eobs
angiotenzinazas hiperproduqcia
gl ukokortikoidibis hiperproduqcia
*al dosteronis hiperproduqcia
A prostagl andinis siWarbe

/// renul i hipertenziis meqanizmSi monawil eobs
angiotenzinazas hiperproduqcia
*angiotenzin ++-is siWarbe
A prostagl andinis siWarbe
E prostagl andinis siWarbe

/// renul i hipertenziis meqanizmSi monawil eobs
angiotenzinazas hiperproduqcia

gl ukokortikoidების hiperproduცია
*E prostagლანდინის დეფიციტი
A prostagლანდინის სინთეზის დაჩეუვა

//// რენული ჰიპერტენზიის მექანიზმის მონაწილეობა
ანგიოტენზინაზის hiperproduცია
gl ukokortikoidების hiperproduცია
*A prostagლანდინის დეფიციტი
A prostagლანდინის სინთეზის დაჩეუვა

//// რენული ჰიპერტენზიის მექანიზმის მონაწილეობა
*ჰიპერნატრიემია
ჰიპონატრიემია
ორგანიზმიდან წყლის გაღებულის გამოყოფის
ანგიოტენზინაზის დაჩეუვის გაღებვა

//// რენული ჰიპერტენზიის მექანიზმის მონაწილეობა
*წყლის შეკავება ორგანიზმში
ჰიპონატრიემია
ორგანიზმიდან წყლის გაღებულის გამოყოფის
ანგიოტენზინაზის დაჩეუვის გაღებვა

//// რენული ჰიპერტენზიის მექანიზმის მონაწილეობა
*ანგიოტენზინაზის დეფიციტი
ჰიპონატრიემია
ორგანიზმიდან წყლის გაღებულის გამოყოფის
ანგიოტენზინაზის დაჩეუვის გაღებვა

//// რენული ჰიპერტენზიის მექანიზმის მონაწილეობა
*ოსმორეცეპტორების გარღვევა ნაიონების სინთეზით
ანტიდიურეზული ჰორმონის დეფიციტი
სისხლძარღვების α -ადრენორეცეპტორების ფუნქციის დაჩეუვა
სარძის დიდი რაოდენობით გამოყოფა

//// რენული ჰიპერტენზიის მექანიზმის მონაწილეობა
*ვაზოპრესინის სინთეზის დაჩეუვა
ანტიდიურეზული ჰორმონის დეფიციტი
gl უკოზურია
სისხლძარღვების α -ადრენორეცეპტორების ფუნქციის დაჩეუვა

//// ჰიპერტონული დაავადების პათოგენეზის მონაწილეობა
*სიმპათიკური რეგულაციის ცენტრების აქტივაცია
პარასიმპათიკური რეგულაციის ცენტრების აქტივაცია
ალდოსტერონის დეფიციტი

baroreceptorebis dammuxruWebel i gavl enis momateba

//// hipertoni i daavadebis patogenezi monawil eobs

* Na^+ da H_2O -s sekaveba organizmsi

parasimpatikuri regulaciis centrebis aqtivacia

al dosteronis deficiiti

baroreceptorebis dammuxruWebel i gavl enis momateba

//// hipertoni i daavadebis patogenezi monawil eobs

antidiurezul i hormonis deficiiti

*sisxl zarvebis kuntovani sris hipertrofia

angiotenzinazas siwarbe

A da E prostaglandinebis siwarbe

//// hipertoni i daavadebis patogenezi monawil eobs

*al dosteronis hiperproduqcia

sisxl zarvebis kuntovani sris hipotrofia

angiotenzinazas siwarbe

A da E prostaglandinebis siwarbe

//// hipertoni i daavadebis patogenezi monawil eobs

hiponatriemia

*rezistiul i sisxl zarvebis spazmi

hipoproteinemia

parasimpatikuri centrebis tonusis momateba

//// hipertoni i daavadebis patogenezi monawil eobs

hiponatriemia

*angiotenzin ++

hipoproteinemia

simpatikuri centrebis tonusis daqveiteba

//// hipertoni i daavadebis patogenezi monawil eobs

sisxl zarvebis hiporeaqciuloba

al dosteronis deficiiti

*renin-angiotenzinis sistemis aqtivacia

renin-angiotenzinis sistemis dartgunva

//// hipertoni i daavadebis patogenezi monawil eobs

sisxl zarvebis hiporeaqciuloba

al dosteronis deficiiti

sisxl zarvebis dilatacia

*sisxl zarvebis kedl is gajirjveba

//// hipertoni i daavadebis patogenezi monawil eobs
sisxl Zardvebis hiporeaqciuloba
al dosteronis deficiiti
sisxl Zardvebis dilatacia
•sisxl Zardvebis hiperreaqciuloba

//// hipertoni i daavadebis patogenezi monawil eobs
*Tirkmlis arteriebis spazmi
periferiul winaarmdegobis daqveiteba sisxl is nakadisadmi
hiponatriemia
wnevis momateba Tirkmlis gorgl is kapilarebSi

//// arteriul wnevis done damokidebul ia
kapilarebis tonusze
limfuri Zardvebis tonusze
venebris tonusze
*marcxena parkuwis sistol is simZl avreze

//// arteriul wnevis done damokidebul ia
kapilarebis tonusze
limfuri Zardvebis tonusze
venebris tonusze
*periferiul winaarmdegobaze

//// arteriul wnevis done damokidebul ia
kapilarebis tonusze
limfuri Zardvebis tonusze
venebris sarqvel ebze
*cirkul irebadi sisxl is mocul obaze

//// did wreSi arteriul wneva qveitdeba
periferiul winaarmdegobis momatebissas
*marcxena parkuwis sistol is Sesustebissas
marcxena parkuwis sistol is gaZl ierebissas
sisxl is siblantis momatebissas

//// did wreSi arteriul wneva qveitdeba
periferiul winaarmdegobis momatebissas
*periferiul winaarmdegobis Semcirebissas
marcxena parkuwis sistol is gaZl ierebissas
sisxl is siblantis momatebissas

//// arteriul wneva qveitdeba
sisxl is siblantis momatebissas

hiperkateqol aminemiisas
mocirkul ire sisxl is mocul obis momatebisas
*periferiul i arteriebis gafarToebisas

//// arteriul i wneva qveiTdeba
sisxl is sibl antis momatebisas
hiperkateqol aminemiisas
periferiul i arteriebis Seviwrovebisas
*cirkul irebadi sisxl is mocul obis Semcirebisas

//// arteriul i sisxl is wneva matul obs
sisxl is sibl antis Semcirebisas
*sisxl is sibl antis momatebisas
reninis deficitisas
marcxena parkuWis systol is Sesustebisas

//// daasaxel eT arteriul i wnevis regul aciaSi monawil e nervul i warmonaqmnebi an
nivTiererebebi
*Tavis tvinis qerqi
paraTireoidul i hormoni
auerbaxis wnul i
gastrini

//// daasaxel eT arteriul i wnevis regul aciaSi uSual od monawil e nervul i
warmonaqmnebi an nivTiererebebi
insul ini
gl ikogeni
*baroreceptorebi
Tavis tvinis Subl is wil i

//// daasaxel eT arteriul i wnevis regul aciaSi monawil e nervul i warmonaqmnebi an
nivTiererebebi
*angiotenzini
surfaqtanti
gl ukagoni

//// daasaxel eT arteriul i wnevis regul aciaSi monawil e nervul i warmonaqmnebi an
nivTiererebebi
*antidiurezul i hormoni
surfaqtanti
gl ukagoni
insul ini

//// sisxl ZarRvebze angiotenzinis moqmedebis meqanizmSi monawil eobs
* α -adrenoreceptorebis mgrZnobel obis momateba
 β -adrenoreceptorebis mgrZnobel obis daqvei Teba
arteriebis gafarToveba
noradrenal inis gamoTavisufli eba simpatikuri dabol oebebi dan

////sisxl ZarRvebze angiotenzinis moqmedebis meqanizmSi monawil eobs
*sisxl ZarRvis kedl is gaj irj veba
 β -adrenoreceptorebis mgrZnobel obis daqvei Teba
arteriebis gafarToveba
acetil qol ini

//// angiotenzini sisxl ZarRvebze moqmedebis
* α -adrenoreceptorebis mgrZnobel obis momatebis gziT
acetil qol inis meSveobiT
sisxl ZarRvis kedel Si K-is da wyl is cvl is cvl il ebebiT
 α -adrenoreceptorebis mgrZnobel obis daqvei Tebis gziT

////angiotenzinis sisxl ZarRvebze gavl ena real izdeba
*al dosteronis saSual ebiT
acetil qol inis saSual ebiT
Tiroqsinis saSual ebiT
kateqol aminebis gavl enis daqvei Tebis gziT

//// Tirkml is rol i sisxl ZarRvTa tonusis regul aciaSi mdgomareobs
F prostagl andinis gamoyofaSi
*reninis gamoyofaSi
dehidrataciaSi
D prostagl andinis gamoyofaSi

//// Tirkml is rol i sisxl ZarRvTa tonusis regul aciaSi mdgomareobs
*wyl is da natriumis cvl aSi monawil eobaSi
urogastrinis gamoyofaSi
C prostagl andinis gamoyofaSi
hipoproteinemiaSi

//// Tirkml is zemoqmedeba sisxl ZarRvTa tonusze xorciel deba
proteinuriiT
I eikopoetiniT
hemopoetiniT
*prostagl andinebiT

//// el eqtrokardiogramaze TP interval is gadi deba axasiaTebis
taqikardias

mocimcime ariTmias
*bradikardias
winagul ovan eqstrasistol as

//// ekg-ze T-P interval is Semcireba axasiaTebis
*taqikardias
winagul ovan eqstrasistol as
sinoaurikul ur bl okadas
bradikardias

//// winagul ovan eqstrasistol as axasiaTebis
parkuWovani kompl eqsis ararseboba
QRST kompl eqsis deformacia
T-P interval is gaxangrZI iveba eqstrasistol is Semdeg
*P kbil is deformacia

//// uaryofiTi P kbil i axasiaTebis
parkuWovan eqstrasistol as
srul atrioventrikul ur bl okadas
*atrioventrikul ur eqstrasistol as
Casmul eqstrasistol as

//// mesame rigis peismekeris ritmiT parkuWebi ikumSeba
parkuWovani eqstrasistol is dros
++ xarisxis atrioventrikul uri bl okadis dros
*srul i atrioventrikul uri bl okadis dros
atrioventrikul uri eqstrasistol is dros

//// avtomatizmis darRvevis Sedegad ganviTarebul gul is ariTmias mi ekuTvneba
nawil obrivi bl okada
sinoaurikul uri bl okada
*taqikardia
srul i bl okada

//// avtomatizmis darRvevis Sedegad ganviTarebul gul is ariTmias mi ekuTvneba
nawil obrivi bl okada
sinoaurikul uri bl okada
*bradikardia
srul i bl okada

//// avtomatizmis darRvevis Sedegad ganviTarebul gul is ariTmias mi ekuTvneba
nawil obrivi bl okada

sinoaurikul uri bl okada
*eqstrasistol a
srul i bl okada

//// gamtarebl obis darRvevis Sedegad ganviTarebul gul is ariTmia miekuTvneba
taqikardia
eqstrasistol uri ariTmia
winagul ovani eqstrasistol ia
*srul i bl okada

////aTeroskl erozul i @fol aqis# gaskdoma da Trombis ganviTareba xSird udevs
safuZvl ad
stabil uri mimdinarel bis stenokardias
*arastabil uri miminareobis stenokardias
variantul stenokardias
arc erTi pasuxi ar aris swori

////gvirgvinovani sisxl is nakadis Semcirebas iwvevs
nomotopuri ritmi
samkardi sarqvl is ukmarisoba
*mwvave arteriul i hipotenzia
azotis oqsidi

////gvirgvinovani sisxl is nakadis Semcirebas iwvevs
nomotopuri ritmi
samkaredi sarqvl is ukmarisoba
*mkveTri taqikardia
azotis oqsidi

////gvirgvinovani sisxl is nakadis Semcirebas iwvevs
nomotopuri ritmi
samkaredi sarqvl is ukmarisoba
*mocimcime ariTmia
azotis oqsidi

////kateqol aminebis mier miokardiumi sdaziane bis meqanizmSi ar monawil eobs
gul is muSaobis gaxSireba da gaZl iereba
Jangbadze miokardiumis moTxovnis momateba
I lipidebis zJanguri Jangvis gaZl iereba
*arc erTi pasuxi ar aris swori

//// taqikardia viTardeba
kateqol aminebis deficitisas
*kateqol aminebis siWarbis dros
hipoTireozis dros
siyviTI is dros

//// taqikardia viTardeba
kateqol aminebis deficitisas
•Tireotoqsikozis dros
hipoTireozis dros
siyviTI is dros

//// taqikardia viTardeba
kateqol aminebis deficitisas
*cxel ebis dros
hipoTireozis dros
qal asSiga wnevis momatebis dros

//// bradipnoes iwvevs
*sunTqvis centris daTrgunva
ZI ieri hi poqsi a-hi perkapni a
hering-breieris refl eqsi
qemoreceptorebis agzneba

//// bradipnoe SeiZI eba ganviTardes
*Tavis tvinis dazianebisas
isteriis dros
rose-bul manis refl eqsis gamo
ZI ieri hiperoqsiiis gamo

\\ \\ xÉÈÒÁÁÁÉÓ ÁÌ xÉÆÁÌÉÓ ÆÒÌ Ó
\\ ÒÁÒÒÈØÈÓÈÉÈ ÒÈÈÉÓ ÒÓÏÈØÁÉÓ ÒÈÌÁÒÈÓÌ ÁÁ
\\ \\ ÌÁÒÒÈÌ ÁÓ ÁÈÁÁÌ ÈÁÁÉÓ ÒÁÌ ÁÁÌÌ ÁÁ
\\ \\ ÈÆÒÁÁÁÁ xÉÈÒÁÉÓ ÒÁÒÓÏÈØÈ ÈÁÁÁØÈÓÈ
\\ \\ ÈÆÒÁÁÁÁ xÉÈÒÁÉÓ ÁÈÁÒÒÈÈÓÒÌ ÁÁ

\\ \\ xÉÈÒÁÉÓ xÉÁÒÌ ÆÈ ÒÁÈÈÈÁÁÁ ÁÁÌÁÈÈÁÒÁÁÓ
\\ \\ ÁÒÌ ÌØÈÌ ÈÈÓÈÓ ÁÒÌ Ó
\\ \\ ØÒÌ ÌÈÈÓÈÈÈ ÌÁÁÁÌÌ ÌÈÈÓ ÁÁÌÌ
\\ \\ ÁÒÌ ÌØÈÓÈÓ ÁÁÌÌ
\\ \\ ÁÌ xÉÆÁÌÉÓ ÁÁÌÌ

\\ \\ xÉÈÒÁÉÓ ÁÈ xÒÆÈÈÓ ÒÌÁÒÈ ØÁÁÈÈÁÁÁÁ
\\ \\ ÌÝÈÒÁ ØÒÁÙÈ ÒÈÓÁÈÈÓ ÒÁÁÒÁÁÁÁÉÓ ÁÒÌ Ó

\\ xÉÉÖÄÉÖ ÁΓÉÄÄÉÖ ÄÖÏ Ö
\\ \\\\ ÉÄÉÉÄÖÄÄÖÉ ÖÉÖÄÉÉÖ ΓÄÉÄÉÖ ÖÉÜÄÖÉÖ ÖÄÏΥÉÖÄÄÉÖÄÖ
\\ \\\\ ÄÖÏ ΓÖÉÖÉÖ ÄÖÏ Ö

//// apnoe aris
sunTqvis gaiSviaTeba
sunTqvis gaxSireba
sunTqviTi ariTmia
*sunTqvis Sewyveta

//// taqipnoe aris
sunTqvis gaiSviaTeba
*sunTqvis gaxSireba
sunTqviTi ariTmia
sunTqvis Sewyveta

//// bradipnoe aris
*sunTqvis gaiSviaTeba
sunTqvis gaxSireba
sunTqviTi ariTmia
sunTqvis Sewyveta

//// eupnoe aris
sunTqvis gaiSviaTeba
sunTqvis gaxSireba
sunTqviTi ariTmia
*sunTqviTi komforti

//// hiperpnoe viTardeba
///Tavis tvinis dazianebisas
/// sisxl Si GJangbadis SemZvel obis momatebisas
//fizikuri datvirTvisas

//// al veol uri ventil aciis darRvevas iwevs
kinetozi
hiperkapnia
*gul mkerdisa da diafragmis moZraobis SezRudva
hipoqsi a

////al veol uri ventil aciis darRvevas iwevs
*botul izmi
hiperkapnia
hipokapnia
hipoqsi a

//// al veol uri ventil aciis darRvevas iwvevs
*pl evris mTI ianobis darRveva
hiperkapnia
hipokapnia
hipoqsi a

//// al veol uri ventil aciis darRvevas iwvevs
*zurgis tvinis motoneronebis funqciis darRveva
zurgis tvinis mgrZnobiare neironebis funqciis darRveva
eqstrasistol uri ariTmia
mitral uri stenozi

//// sasunTqi kunTebisTvis nervul i impul sebis gadacema irRveva
fil tvebis anTebis dros
*pol iomiel itis dros
miozitis dros
pl evritis dros

//// sasunTqi kunTebisTvis impul sebis gadacema irRveva
difteriis dros
fil tvebis atel eqtazis dros
peritonitis dros
*tetanusis dros

////sasunTqi kunTebisTvis impul sebis gadacema irRveva
difteriis dros
fil tvebis atel eqtazis dros
fil tvis emfizemis dros
*botul izmis dros

//// diafragmis kl onuri krunCxva iwvevs
boyins
asTmas
*sl okins
gul Zmarvas

//// dispnoe aris
*qoSini
sunTqviTi komforti
xSiri zerel e sunTqva
Rrma da xSiri sunTqva

//// hiperpnoe aris

gai SvიაTebul i sunTqva
qoSini
*Rმა da xSiri sunTqva
xSiri zerel e sunTqva

//// bradipnoe aris
xSiri zerel e sunTqva
Rმა da xSiri sunTqva
*gai SvიაTebul i sunTqva
qoSini

//// taqipnoe (pol ipnoe) aris
*xSiri zerel e sunTqva
Rმა da xSiri sunTqva
qoSini
gai SvიაTebul i sunTqva

//// periodul sunTqvas iwvevs
 α -adrenoreceptorebis gaRizianeba
*narkotikul i nivTierebebiT mowamvl a
sunTqvis centris agzneba
sunTqvis centris agznebadobis momateba CO₂-is mimarT

//// periodul sunTqvas iwvevs
 α -adrenoreceptorebis gaRizianeba
*sunTqvis centris hipoqsia
sunTqvis centris agzneba
sunTqvis centris agznebadobis momateba CO₂-is mimarT

//// periodul sunTqvas iwvevs
 α -receptorebis gaRizianeba
*sunTqvis centris agznebadobis daqvei Teba CO₂-is mimarT
sunTqvis centris agzneba
sunTqvis centris agznebadobis momateba CO₂-is mimarT

//// hering-breieris refl eqsi naadrevad aRmocendeba
Ca⁺ ionebis gavl eniT
Na⁺ ionebis gavl eniT
*al veol ebSi eqsudatis dagrovebis gamo
bronqospazmis gamo

//// hering-breieris refl eqsi naadrevad aRmocendeba
Ca⁺ ionebis gavl eniT
Na⁺ ionebis gavl eniT

*H⁺ da K⁺-is ionebis gavl eni T
bronqospazmis gamo

//// zerel e da xSiri sunTqva fil tvis anTebis dros dakavSirebul ia
gaWimvisadmi al veol ebis receptorebis mgrZnobel obis momatebasTan
*eqsudatSi H⁺ da K⁺ ionebis simciresTan
eqsudatSi Na da Ca ionebis siWarbesTan
hering-breieris refl eqsis SesustebasTan

//// zerel e da xSiri sunTqva fil tvis anTebis dros dakavSirebul ia
gaWimvisadmi al veol ebis receptorebis mgrZnobel obis. momatebasTan
*hering-beieris refl eqsis gaZl ierebasTan
eqsudatSi Na da Ca ionebis siWarbesTan
hering-breieris refl eqsis SesustebasTan

//// fil tvebis emfizemis dros
izrdeba fil tvis el astikuroba
*mcirdeba fil tvis el astikuroba
qveiTdeba fil tvis Wimvadoba
viTardeba inspiraciul i qoSini

//// fil tvebis emfizemis dros
*viTardeba eqspiraciul i qoSini
mcirdeba al veol ebis mocul oba
izrdeba fil tvis sasunTqi zedapiri
izrdeba fil tvis el astikuroba

//// eqspiraciul i qoSini fil tvebis emfizemis dros viTardeba
fil tvis Wimvadobis Semcirebis gamo
*fil tvis el astikurobis daqveiTebis gamo
sasunTqi kunTebis inervaciis darRvevis gamo
bronqospazmis gamo

//// fil tvebis atel eqtazis mizezia
*al veol ebis kompresia
bronqospazmi
mSral i pl evriti
surfaqtantis siWarbe

//// fil tvebis atel eqtazis mizezia
*pnevmoToraqsi
bronqospazmi
mSral i pl evriti
bronqiti

//// fil tvebis atel eqtazis mizezia
*hidroToraqsi
bronqospazmi
mSral i pl evriti
bronqiti

//// fil tvis sasunTqi zedapiri mcirdeba
bronqitis dros
traqetis dros
mSral i pl evritis dros
•fil tvebis anTebis dros

//// fil tvis sasunTqi zedapiri mcirdeba
bronqitis dros
traqetis dros
mSral i pl evritis dros
*eqsudaciuri pl evritis dros

//// fil tvebis sasunTqi zedapiri mcirdeba
mSral i pl evritis dros
hiperkapniis dros
bronqitis dros
*fil tvis atel eqtazis dros

//// fil tvebis sasunTqi zedapiri mcirdeba
mSral i pl evritis dros
hiperkapniis dros
bronqitis dros
*hidroToraqsis dros

//// fil tvebis sasunTqi zedapiri mcirdeba
*pnevmoToraqsis dros
bronqitis dros
miozitis dros
bronqiolititis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
*surfaqtantis nakl ebobis dros
zemo sasunTq gzebSi ucxo sxel is moxvedrisas
mSral i pl evritis dros
bronqospazmis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba

*eqsudaciuri pl evritis dros
zemo sasunTq gzebSi ucxo sxeul is moxvedrisas
mSral i pl evritis dros
bronqospazmis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
traqei tis dros
bronqospazmis dros
sl okinis dros
*axal Sobil Ta hial inuri membranozis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
*atel eqtazis dros
bronqospazmis dros
sl okinis dros
traqei tis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
*fil tvis fibrozisas
bronqospazmis dros
sl okinis dros
traqei tis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
*mcire wreSi Segubebis dros
zemo sasunTq gzebze zewol isas
surfaqtantis siWarbisas
bronqebis sanaTurSi I orwos dagrovebisas

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
*fil tvis anTebis dros
zemo sasunTq gzebze zewol isas
traqei tis dros
bronqebis sanaTurSi I orwos dagrovebisas

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
*tuberkul ozis dros
zemo sasunTq gzebze zewol isas
traqei tis dros
bronqebis sanaTurSi I orwos dagrovebisas

//// surfaqtanti%
*amcirebs fil tvis zedapirul daWimul obas

zrdis fil tvis zedapirul daWimul obas
aZnel ebs fil tvis gaSI as CasunTqvis dros
amuxruWebs hering-breieris refl eqss

//// surfaqtanti warmoiqmneba
fil tvis l imfur sadinarebSi
bronqi ol ebSi
bronqebSi
*al veol ebSi

//// surfaqtantis defici ti viTardeba
*xel ovnuri sunTqvis aparatis gamoyenebi sas
al kal ozis dros
bronqitis dros
fibrozis dros

//// surfaqtantis defici ti viTardeba
*axal Sobil is hial inuri membranozisas
al kal ozis dros
bronqitis dros
fibrozis dros

//// kompensaciuri hiperventil acia viTardeba
hiperoqsi is dros
*anemiebi s dros
Tavis tvinSi sisxl Caqcevis dros
sunTqvis centris funqci is daTrgunvi sas

//// kompensaciuri hiperventil acia viTardeba
hiperoqsi is dros
*gul -sisxl ZarRvTa sistemis ukmarisobis dros
Tavis tvinSi sisxl Caqcevis dros
sunTqvis centris funqci is daTrgunvi sas

//// xangrZl ivi da Zl ieri hiperventil acia iwvevs
acidozs
*hi pokapni as
anTebas
hi poqsi as

//// hipoventil acia iwvevs
hiperoqsi as
al kal ozs
anTebas
*hi poqsi as

//// hipoventil acia iwvevs
hiperoqsi as
al kal ozs
hipergl ikemias
*hi perkapni as

//// fil tvebis difuziis unari mcirdeba
kapil arebSi sisxl is nakadis Semcirebisas
kapil arebis Seiwrovebis dros
al veol ebis kedl is gaTxel ebis dros
*al veol ebis kedl is gasqel ebis dros

//// fil tvebSi difuziis unari mcirdeba
bronqitis dros
*al veol ebis SeSupebis dros
intersticiul i siTxis Semcirebis dros
surfaqtantis deficitis dros

//// fil tvebis difuziis unari qveiTdeba
al veol ur-kapil arul i membranis gaTxel ebisas
surfaqtantis deficitisas
*al veol ur-kapil arul i bl okisas
surfaqtantis siWarbisas

//// al veol ur-kapil arul i bl oki SeiZl eba Camoyal ibdes
bronqitis dros
*fil tvebis intersticiul i SeSupebis dros
bronqiolit is dros
miokarditis dros

//// fil tvis difuziis unari qveiTdeba
mcire wreSi sisxl is Segubebis dros
*fil tvis kapil arebSi sisxl is nakadis siCqaris momatebisas
kapil arebSi sisxl is nakadis siCqaris Semcirebisas
bronqitis dros

//// fil tvis difuziis unari qveiTdeba

mcire wreSi sisxl is Segubebis dros
*fil tvis anTebis dros
kapil arebSi sisxl is nakadis siCqaris Semcirebisas
bronqitis dros

//// fil tvis perfuzia qveiTdeba
*fil tvis arteriis stenozis dros
bronqiotil is dros
bronqitis dros
fil tvis arteriis gafarToebis dros

//// airTa cvl is romel i etapis safuZvel ia difuzia
*airis gadanacvl eba kapil arebidan qsovil TaSua sivrceSi
airis gadanacvl eba mcire wridan qsovil Ta kapil arebamde
airis gadanacvl eba mcire wridan did wreSi
airis gadanacvl eba garemodan al veol ebamde

//// airTa cvl is romel i etapis safuZvel ia konveqciuri transporti
*airis gadanacvl eba garemodan al veol ebamde
airis gadanacvl eba qsovil TaSua sivrcidan uj redebamde
airis gadanacvl eba al veol ebidan fil tvis kapil arebamde
airis gadanacvl eba kapil arebidan qsovil TaSua sivrceSi

//// sunTqvis centri aRigzneba
hiperoqsiisas
*hiperkapniis dros
 H^+ hipoiioniis dros
hipokapniisas

//// sisxl ZarRvTa qemoreceptorebi gansakuTrebiT mgrZnobiareni arian
*hipoqsiis mimarT
hipokapniis mimarT
hiperoqsiis mimarT
hipertenziis mimarT

//// broqospazms iwevs
adrenalini
*parasimpaTikuri gavl enis siWarbe
simpaTikuri gavl enis siWarbe
hipoqsi a

//// bronqebis gafarToebas iwevs
*adrenalini

histamini
simpatikuri gavl enis sisuste
hiperoqsi a

//// sunTqvis aqtis romel saxes sdevs Tan mousvenroba da SiSi
taqipnoe
bradi pnoe
*dispnoe
pol ipnoe

//// qoSini dakavSirebul ia
sunTqvis centris SekavebasTan
qemoreceptorebis funqciis daTrgunvasTan
*l imburi sistemis agznebasTan
baroreceptorebis agznebasTan

//// qoSinis meqanizmSi gul is dekompensaciis dros monawil eobs
hipernatriemia
hipokapnia
rose-bul manis refl eqsi
*wnevis dacema venebSi

//// qoSinis meqanizmSi gul is dekompensaciis dros monawil eobs
hipernatriemia
hipokapnia
rose-bul manis refl eqsi
*hi poqsi a

//// sunTqvis centris agznebis meqanizmSi gul is dekompensaciis dros monawil eobs
hipokapnia
hiperoqsi a
al veol ebis receptorebis funqciis daTrgunva SeSupebiTi siTxiT
*hiperkapnia

//// CasunTqviTi qoSini viTardeba
bronqiolit is dros
brongospazmis dros
bronqul i asTmis dros
*difteriul i krupis dros

//// CasunTqviTi qoSini viTardeba
bronqiolit is dros

brongospazmis dros
broqul i asTmis dros
*I aringospazmis dros

//// CasunTqviTi qoSini viTardeba
fil tvis emfizemis dros
pnevmoToraqsis dros
fil tvis emfizemis dros
*sasunTq gzebSi ucxo sxeul is moxvedrisas

//// eqspiraciul i qoSini viTardeba
pnevmoToraqsis dros
xorxis SeSupebis dros
traqei tis dros
*bronqul i asTmis dros

//// eqspiraciul i qoSini viTardeba
pnevmoToraqsis dros
xorxis SeSupebis dros
traqei tis dros
*bronqi ol ebis I orwovani SeSupebisas

//// xvel a SeiZl eba gamoiwvios
G-receptorebis gaRizianebam
pl evris nervul i dabol oebebis agznebis daqvei Tebam
*traqeis da xorxis receptorebis gaRizianebam
brongebis spazmma

//// xvel a SeiZl eba gamoiwvios
G-receptorebis gaRizianebam
pl evris nervul i dabol oebebis agznebis daqvei Tebam
*pl evris nervul i dabol oebebis gaRizianebam
baroreceptorebis gaRizianebam

//// Cein-stoqsis sunTqvis dros
sunTqva riTmul ia
sunTqvis ampl ituda Tanabaria
*sunTqvis siRrme pazis Semdeg TandaTanobiT ikl ebs, xol o Semdeg TandaTanobiT
izrdeba pazis dadgomamde
sunTqva Rrma da xmauriania

//// biotis tipis sunTqvis dros
sunTqva riTmul ia

*sunTqviT moZraobebS Soris vl indeba apnoe
sunTqvis ampl ituda TandaTanobiT izrdeba, Semdeg TanaTanobiT mci rdeba pauzis
dadgomamde
sunTqva Rrma da xmauriania

//// kusmaul is sunTqvis dros
sunTqva riTmul ia
sunTqviT moZraobebS Soris pauzaa
*sunTqva Rrma da xmauriania
sunTqvis siRrme TandTanTan izrdeba, Semdeg ki mci rdeba pauzis dadgomamde

//// fil tvebis ventil aciis darRveva sasunTqi kunTebis funqciis darRvevis gamo
aRiniSneba
gripis dros
*botul izmis dros
simpatikuri nervul i sistemis agznebis dros
difteriis dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva
*miozitis dros
mTis daavadebis dros
nefritis dros
hepatitis dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva
*meteorizmis dros
mTis daavadebis dros
nefritis dros
gastritis dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva
*peritonitis dros
mTis daavadebis dros
nefritis dros
gastritis dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva
hepatitis dros
nefritis dros
*ascitis dros
cistitis dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva

*xerxemi is deformaciisas
hepatitis dros
anginis dros
Saqriani diabetes dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva
*neknTaSua nevril giis dros
hepatitis dros
anginis dros
Saqriani diabetes dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva
*pl evritis dros
emfizemis dros
atel eqtazis dros
nefritis dros

//// gul mkerdis yafazis sunTqviTi moZraoba irRveva
*pl evrul i Sexorcebebis dros
emfizemis dros
atel eqtazis dros
nefritis dros

//// fil tvebis ventil acia irRveva
*zemo sasunTq gzebSi dabrkol ebis gaCenisas
gl ositis dros
enteritis dros
rkinadeficituri anemiis dros

//// garegani sunTqvis obstruqciul i tipis ukmarisoba viTardeba
• l aringospazmis dros
fil tvis anTebis dros
mcire wreSi Segubebis dros
fil tvis fibrozis dros

////garegani sunTqvis obstruqciul i tipis ukmarisoba viTardeba
•zemo sasunTq gzebze zewol is dros
surfaqtantis deficitis dros
fil tvis emfizemis dros
axal Sobil Ta hial inuri membranozis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
difteriis dros
bronqiol ebis sanaTurSi l orwos dagrovebis dros

I aringospazmis dros

- fil tvis atel eqtazis dros

//// garegani sunTqvis retriqsiul i tipis ukmarisoba viTardeba
difteriis dros

bronqiol ebis sanaTurSi I orwos dagrovebis dros

I aringospazmis dros

*fil tvis tuberkul ozis dros

//// kuWis wvenis sekreciis stimul atoria

gastromainhibirebel i hormoni

urogastrini

*gl ukokortikoidebi

kal ikreini

//// kbiI is kariesis paTogenezSi monawil eobs

hipersal ivacia

*hiposal ivacia

gastrini

mucini

//// kbiI is kariesis paTogenezSi monawil eobs

hipersal ivacia

*naxSirwyl ebis miRebisas warmoqmnil i organul i mJavebi

ciI ebis monel ebisas warmoqmnil i organul i mJavebi

mucini

//// nerwyvis gamoyofis centri mdebareobs

oTxgorakSi

varol is xidSi

naTxemSi

*mogrZo tvinSi

//// hipersal ivacia viTardeba

*bul barul i dambI is dros

cxel ebis dros

eqsikozis dros

simpatomimeti kebi T mowamvl isas

//// hipersal ivacia viTardeba
*piris Rrus I orwovanis anTebis dros
cxel ebis dros
eqsikoziis dros
simpatomimetikebiT mowamvl isas

//// hipersal ivacia viTardeba
*orsul obis dros
bronqitis dros
sanerwyve jirkvl ebis anTebis dros
atropiniT mowamvl is dros

//// rodis SeiZl eba hqondes hipersal ivacias dacviTi mniSvnel oba
bul barul i dambli is dros
*intoqsikaciis dros
eqsikoziis dros
gul isrevis dros

//// hiposal ivacia viTardeba
bul barul i dambli is dros
ezofagosal ivaciuri refl eqsis moqmedebisas
parasimpatikomimetikebiT mowamvl isas
*eqsikoziis dros

//// hiposal ivacia SeiZl eba ganviTardes
*parasimpatikuri inervaciis darRvevisas
gul isrevis dros
bul buri dambli is dros
orsul obis dros

//// hiposal ivacia SeiZl eba ganviTardes
bul buri dambli is dros
hipoTermiis dros
*Zl ieri emociების dros
orsul obis dros

//// hiposal ivaciis dros
iTrguneba baqteriebisi gamravli eba
irRveva cximiis moneli eba
irRveva cil is moneli eba
*ziandeba piris Rrus I orwovani

//// hiposal ivaciis dros
iTrguneba baqteriebisi gamravli eba

irRveva cximis monel eba
irRveva cil is monel eba
*enaze Cndeba nadebi

/// hiposal ivacia xel s uwyobs
*infeqciis gavrcel ebas Sua yurze
organizmis gauwyl ovnebas
bronqits
cil ebis monel ebas

/// urogastrini gamoiyofa
kuWis I orwovanSi
sanaRvl e gzebSi
naRvl is buStSi
*sanerwyve j irkvl ebSi

/// kuWis rezervuarul i funqciis darRvevisas
viTardeba hipersekrecia
*viTardeba Rebineba
sakvebi kuWi dan swrafad evakuirdeba
viTardeba aql orhidria

/// kuWis rezervuarul i funqciis darRvevisas
viTardeba hipersekrecia
*sakvebi didxans yovndeba kuWSi
sakvebi kuWi dan swrafad evakuirdeba
viTardeba aql orhidria

/// krunCxvebis ganviTarebaSi kuWis atoniis dros monawil eobs
Na⁺-ionebis kargva
*H⁺-ionebis kargva
metabol uri acidozi
respiraciul i al kal ozi

///krunCxvis ganviTarebaSi kuWis atoniis dros monawil eobs
Na⁺-ionebis kargva
*metabol uri al kal ozi
metabol uri acidozi
respiraciul i al kal ozi

/// krunCxvis ganviTarebaSi kuWis atoniis dros monawil eobs
*pirRebineba
Na⁺-ionebis kargva
metabol uri acidozi

Na⁺

//// aqil ia aris

*kuWis wenis gamouyofl oba
maril mJavas gamouyofl oba
maril mJavas gamoyofis Semcireba
igivea, rac achlorhydria

//// kuWis wenis hipersekrecia vi Tardeba
aqil iis dros

*Tormetgoj a nawl avis wyl ul is dros
atrofiul i gastritis dros
pil orusis pirRiobisas

//// kuWis wenis hipersekrecia vi Tardeba
gadaxurebis dros

*gadacivebis dros
kuWis kibos dros
simpatikuri gavl enis siWarbisas

//// kuWis wenis hipersekrecia vi Tardeba
gadaxurebis dros

*sal icil atebis moqmedebisas
kuWis kibos dros
simpatikuri gavl enis siWarbisas

//// kuWis wenis hipersekrecia iwvevs
pil orusis pirRiaobas

nawl avebis peristal tikis gaZl ierebas
*nawl avebis peristal tikis daqvei Tebas
hiposal ivacias

//// hipersekrecia iwvevs

pil orusis pirRiaobas
nawl avebis peristal tikis gaZl ierebas
*gul Zmarvas
hiposal ivacias

//// hiposekrecia vi Tardeba

Tormetgoj a nawl avis wyl ul is dros
antral uri gastritis dros
*kuWis kibos dros
cdomil i nervis agznebisas

//// hi posekrecia vi Tardeba
Tormetgoj a nawl avis wyl ul is dros
antral uri gastritis dros
*atrofiul i gastritis dros
cdomil i nervis agznebisas

//// organul i aqil ia vi Tardeba
*atrofiul i gastritis dros
kuWis I orwovanis sisxl momaragebis daqvei Tebis dros
kuWis I orwovanis inervaciis dar Rvevis dros
pil orospazmis dros

//// funqciuri aqil ia vi Tardeba
atrofiul i gastritis dros
*kuWis I orwovanis inervaciis dar Rvevis dros
pil orostenozis dros
kuWis kibos dros

//// aqil iis dros
vi Tardeba pil orospazmi
*pil orusi Ri aa
vi Tardeba pil orostenozis
vi Tardeba yabzoba

//// aqil iis dros
vi Tardeba pil orospazmi
*gamovardeba pil orusis refl eqsi
vi Tardeba pil orostenozis
vi Tardeba yabzoba

//// aqil iis dros
sakvebi yovnde ba kuWSi
*sakvebi swrafad evakuirdeba kuWi dan
vi Tardeba pol ici temia
gamoiyofa gastromukoproteini

//// aqil iis dros
*nawl avebis peristal tika ZI ierdeba
nawl avebis peristal tika qvei Tdeba
vi Tardeba hyperaciditas
aRini Sneba H^+ i onebis siWarbe

//// ra monawil eobs mdgradi faRara Tobis ganvi TarebaSi aqil iis dros

pil orospazmi

*mounel ebel i sakvebis swrafi evakuacia nawl avebSi
nawl avebis peristal tikis Sesusteba
sekretini

//// ra monawil eobs aqil iuri anemiis ganviTarebis meqanizmSi
kuWis wwenSi HCl-is ararseboba
kuWis wwenSi gastromukoproteinis arseboba
* orval entiani rkinis samval entianad gardaqmnis darRveva
samval entiani al uminis orval entianad gardaqmnis darRveva

//// aqil ias axasiaTebS
mJave sunis boyini
• I aye kvercxis sunis boyini
gastrinis siWarbe
HCl-is siWarbe

//// aqil ias axasiaTebS
mJave sunis boyini
• gogirdwyal badis dagrogveba kuWSi
gastrinis siWarbe
gul Zmarva

//// kuWis peristal tikas amcirebs
• simpatikuri gavl ena
cdomil i nervi
gastromukoproteini
gastrini

//// kuWis peristal tikas amcirebs
• kateqol aminebi
cdomil i nervi
gastromukoproteini
sekretini

//// kuWis peristal tikis stimul atoria
• motil ini
urogastrini
kateqol aminebi
sekretini

//// kuWis peristal tika ZI ierdeba
aqol iis dros

anemi is dros

cximi ani sakvebis miRebi sas

- cdomil i nervis agznebi sas

//// kuWis peristal tika sustdeba

wyl ul ovani daavadebis dros

naRvl is kol ikis dros

anemi is dros

- cximi ani sakvebis miRebi sas

//// gul Zmarvis meqanizmSi monawil eobs

diafragmis nervis dambli a

pil orusis refl eqsis gaZl iereba

pil orusis refl eqsis gamovardna

- kardi is gaReba

//// gul Zmarvis meqanizmSi monawil eobs

pil orusis refl eqsis gaZl iereba

pil orusis refl eqsis gamovardna

kardiospazmi

- kuWis antiperistal tika

//// gul Zmarvis meqanizmSi monawil eobs

- maril mJavas momateba kuWis wvenSi

kardiospazmi

kuWis kunTebis moduneba

pil orusis refl eqsis gamovardna

//// gul Zmarvis meqanizmSi monawil eobs

- kuWis wvenis refl uqsi sayl apav mil Si

kardiospazmi

kuWis kunTebis moduneba

pil orusis refl eqsis gamovardna

//// sl okinis meqanizmSi monawil eobs

- diafragmis gaRizianeba

mucl is presis dambli a

pil orusis moduneba

diafragmis nervis dambli a

//// sl okinis meqanizmSi monawil eobs

- diafragmis nervis gaRizianeba

diafragmis moduneba

mucl is presis damb l a
pil orusis moduneba

//// boyinis meqanizmSi monawil eobs

- kardiis gaReba
diafragmis nervis damb l a
kuWis kunTebis moduneba
pil orusis moduneba

//// Rebinebis refl eqsis umniSvnel ovanesi refl eqsogenuri zonebia
marcxena ferdqveSa are

Tirkml is menj i
• xaxis ukana kedel i
sigmoiduri nawl avi

//// Rebinebis meqanizmSi monawil eobs

diafragmis nervis damb l a
pil orusis gaReba
kuWis peristal tika
• kardiis gaxsna

//// pirRebinebis meqanizmSi monawil eobs

kuWis kunTebis moduneba
kardiis spazmi
• diafragmis moduneba
kuWis ZI ieri peristal tika.

//// pirRebinebis meqanizmSi monawil eobs

- kuWis ZI ieri antiperistal tika
kuWis kunTebis moduneba
kardiis spazmi
kuWis ZI ieri peristal tika.

//// ZI ieri pirRebineba viTardeba

- orsul Ta toqsikozis dros
eqsikozis dros
diafragmis nervis damb l isas
anemiabis dros

//// ZI ieri pirRebineba viTardeba

- pil orostenozis dros
eqsikozis dros

diaphragmის ნერვის დაზიანება
ანემიის დროს

//// ზიანი მიხედვით
კიონების კარგვა
• კრუნჩხვები
დიარეა
აციდოზი

//// ზიანი მიხედვით
კიონების კარგვა
• ალკალიოზი
დიარეა
აციდოზი

//// ზიანი მიხედვით
კიონების კარგვა
• ჰიონების კარგვა
დიარეა
აციდოზი

//// ცენტრალური უნაყოფო მიხედვით ზიანი ება განვითარების
სისხლძარღვის დროს
კუვის გარეგანი ნაწილის
მთავარი დაავადების დროს
• ტვინის სერვის დროს

//// ცენტრალური უნაყოფო მიხედვით ზიანი ება განვითარების
სისხლძარღვის დროს
კუვის გარეგანი ნაწილის
მთავარი დაავადების დროს
• კალასიგა უნაყოფო მამების დროს

//// კუვის ღრვანი გარსის დაზიანების ფაქტორია
გასტრომუკოპროტეინი
კამპილობაქტერიების არსებობა
ჰისტამინი
• ღრვი

//// კუვის ღრვანი გარსის დაზიანების ღრვის გამოყოფის მიხედვით
გონივრული სტიმულით სემციების
გასტრომუკოპროტეინის დეფიციტის

- kampil obaqteriebis adheziis gamo kuWis I orwovanze urogastrinis gavI eniT

//// kuWis I orwovani garsis damcvel i I orwos gamoyofa mcirdeba qol inergul i stimul aciis Semcirebisas

- kampil obaqteriebis ararsebobisas
- gastromukoproteinis deficitisas
- qol inergul i stimul aciis dros

//// kuWis I orwovani garsis damcvel i I orwos gamoyofa mcirdeba gastromukoproteinis deficitisas

- cdomil i nervis gavI eniT
- qol inergul i stimul aciis Semcirebisas
- histaminis deficitisas dros

//// wyal badionta SeRweva kuWis j irkvl ovani aparatis siRmeSi iwevs

- histaminis gamoyofas
- gastromukoproteinis gamoyofas
- sisxl ZarRvebis dil atacias
- qol ecistokininis gamoyofas

//// wyal badionta SeRweva kuWis j irkvl ovani aparatis siRmeSi iwevs

- kuWis I orwovani sisxl momaragebis darRvevas
- kuWis kunTebis modunebas
- gastromukoproteinis gamoyofas
- urogastrinis gamoyofas

//// wyal badionta SeRweva kuWis j irkvl ovani aparatis siRmeSi iwevs

- histaminis gamoyofas
- kuWis kunTebis modunebas
- gastromukoproteinis gamoyofas
- urogastrinis gamoyofas

//// kampil obaqteriebis adhezia kuWis I orwovani uj redebze iwevs I orwos gamoyofis momatebas

- I orwos gamoyofis Semcirebas
- amcirebs gastromukoproteinis gamoyofas
- I orwovani rezistentobas gazrdas

//// kampil obaqteriebis adhezia kuWis I orwovani uj redebze iwevs

- I orwovani sisxl momaragebis Semcirebas
- I orwovani sisxl ZarRvebis dil atacias

kuWis wwenis agresiul obis Sesustebas
aqilias

//// H⁺ionebi

- aTavisufl eben l orwovanis poxieri uj redebi dan histamins
amuxruWeben gastrinis gamoyofas
maRI eben gastromukoproteinis gamoyofas
amuxruWeben histaminis gamoyofas

//// Tormetgoj a nawl avis wyl ul is paTogenezSi monawil eobs

- kuWis wwenis mJavianobis momateba
bi karbonatebis siWarbe
gl ukokortikoidemis Semcireba
naRvl is sekreciis momateba

//// Tormetgoj a nawl avis wyl ul is ganviTarebis pirobas qmnis
pankreas wwenis sekreciis momateba

- Tormetgoj a nawl avSi gadasul i kuWis wwenis ganeitral ebis Seferxeba
gastromukoproteinis gamoyofis Seferxeba
bi karbonatebis siWarbe

//// Tormetgoj a nawl avis wyl ul is ganviTarebis pirobas qmnis

- kuWis motorikis gaZl iereba
kuWis wwenis mJavianobis daqvei Teba
pankreas wwenis sekreciis momateba
bi karbonatebis siWarbe Tormetgoj a nawl avSi

//// kuWis l orwovanis mimaRT agresiul i faqtoria

- pepsini
urogastrini
Na⁺-is ionebi
gastromukoproteini

//// kuWis wyl ul is paTogenezuri meqanizmi dakavSirebul ia

kuWis wwenis mJavianobis daqvei TebasTan
kuWis motorikis SesustebasTan
*l orwovanis dacviTi Tvi sebebis daqvei TebasTan
gastromukoproteinis gamoyofasTan

//// Tormetgoj a nawl avis wyl ul is paTogenezuri meqanizmi upiratesad dakavSirebul ia

*kuWis wwenis agresiu obis momatebasTan
kuWis motorikis SesustebasTan
gastrinis deficitTan
pankreas is wwenis sekreciis momatebasTan

//// wyl ul ovani daavadebis paTogenezSi SeiZl eba monawil eobdes
*hipoTal amur-hipofizur-Tirkmel zeda j irkvl is stresul i aqtivacia
gl ukokortikoidemis defici ti
gastrinis defici ti
pankreas is wwenis gamoyofis momateba

\\ \\ aÉDÍ ÓAÉ ÉÁÁÝÉÁ ÚÁÉPÉ ÁÁÁ ÁÁÍÁÉÉÁÒÁÁÓ
\\ \\ ÁÓÉÉÓÓÁÁÉÓ ÁÓÍ Ó
\\ \\ ÁÓÉÁÓÓÉ ÁÁÍÁÉÉÓ ÁÓÍ Ó
\\ \\ ÓÉÍÐÁÓÉÉÓÓÉ ÍÁÓÁÓÉÉ ÓÉÓÓÁÍÉÓ ÓÍ ÍÓÓÉÓ ÍÍ ÍÁÓÁÁÉÓÁÓ
\\ \\ Í ÓÓÓÉÍ ÁÉÓ ÁÓÍ Ó

\\ \\ aÉDÍ ÓAÉ ÉÁÁÝÉÉÓ ÁÓÍ Ó
\\ \\ ÞÍÁÉ ÁÁÁÁ ÚÉÁÐÁÉÓ ÁÐÓÉ
\\ \\ ÁÐÓÉÁÁÁÁ ÍÁÓÚÉÓÐÚÉÁÁÉÓ ÍÍ ÍÁÉÁÁÁ
\\ \\ ÉÓÚÁÁÁÁ ÝáÉÍÉÓ ÍÍ ÍÁÉÁÁÁ
\\ \\ ÉÓÚÁÁÁÁ ÝÉÉÉÓ ÍÍ ÍÁÉÁÁÁ

\\ \\ Í ÓÁÁÍÓÉÉ ÁÐÉÉÉÁ ÁÉÉÁÓÁÁÁÁ
\\ \\ ÉÓáÉÓ ÉÍ ÓÐÍ ÁÁÍÉÓ ÉÍÁÓÁÁÝÉÉÓ ÁÁÓÚÁÁÁÉÓÁÓ
\\ \\ ÉÓáÉÓ ÉÍ ÓÐÍ ÁÁÍÉÓ ÓÉÓáÉÍÍ ÍÁÓÁÁÁÁÉÓ ÁÁÐÁÁÉÉÁÁÉÓ ÁÓÍ Ó
\\ \\ ÉÓáÉÓ ÉÉÁÍ Ó ÁÓÍ Ó
\\ \\ ÐÉÉÍ ÓÍ ÓÐÁÆÍÉÓ ÁÓÍ Ó

\\ \\ ÐÉÉÍ ÓÓÓÉÓ áÁÍÁÓÐÉÉÁÉ ÓÐÁÆÍÉÓ ÍÉÆÁÆÉÁ
\\ \\ ÉÓáÉÓ ÍÁÁÁ ÚÉÁÉÁÁÓÉÓ ÁÁÁÁÓÁÉÁ ÉÍ ÓÍÁÓÁÍ áÁ ÍÁÐÉÁÁÓÉ
\\ \\ ÉÓáÉÓ ÚÉÁÉÁÁÓÉÓ ÁÁÁÁÓÁÉÁ ÓÁÚÉÁÐÁÁ ÍÉÉÚÉ
\\ \\ ÉÓáÉÓ ÞÁÁÍÉÓ áÉDÍ ÓÁÉÓÁÝÉÁ
\\ \\ ÁÍÓÁÓÉÓÉ

////pankreas is mZime dazi anebam SeiZl eba gamoi wwi os
hi perproteini mi a
*irgvl i vmdebare qsovil ebis nekrozi
aqil ia
nefrozi

//// xangrZl i vi da Zl i eri faRaraToba iwvevs

*eqsi kozo
hipovol emias
ol igocitemiur hipovol emias
el eqtrol itebis siWarbes

//// xangrZI ivma da ZI ierma faRaraTobam SeiZI eba gamoiwvios
*el eqtrol itebis deficiiti
arteriul i hipertenzia
ol igocitemiuri hipovol emia
el eqtrol itebis siWarbe

//// spazmuri yabzoba SeiZI eba ganviTardes
*refl eqsurad mucl is Rrus organoebis receptorebis gaRizianebis sas
aqil iis gamo
aqol iis gamo
B avitaminosis dros

//// atoniuri yabzoba SeiZI eba ganviTardes
gastrinis momatebisas
sakvebSi K^+ da Ca^+ ionebis siWarbisas
aqil iis dros
*aqol iis dros

//// atoniuri yabzoba SeiZI eba ganviTardes
*sakvebSi uj redisis Semcirebisas
sakvebSi uj redisis momatebisas
aqil iis dros
nawl avebSi naRvl is mJavebis gadasvl is momatebisas

//// xangrZI ivi yabzobis as
izrdeba nawl avis wenis sekrecia
*mcirdeba nawl avis wenis sekrecia
mcirdeba duRil is da l pobis procesebis intensivoba
viTardeba hirSprungis daavadeba

//// xangrZI ivi yabzobis as
izrdeba nawl avis wenis sekrecia
viTardeba nawl avebis invaginacia
*viTardeba autointoqsikacia nawl avebidan
viTardeba hirSprungis daavadeba

//// nawl avebis meqanikuri gauval oba viTardeba

nawl avebis sisxl ZarRvebis Trombozisas
nawl avebis muskul aturis dambli isas
*nawl avebis simsi vniasas
hirSprungis daavadebissas

//// nawl avebis meqanikuri gauval oba viTardeba
nawl avebis sisxl ZarRvebis Trombozisas
*nawl avis invaginacissas
nawl avis muskul aturis spazmiasas
nawl avis muskul aturis dambli isas

//// nawl avebis meqanikuri gauval oba viTardeba
nawl avebis sisxl ZarRvebis Trombozisas
*hel minTozebis dros
nawl avis muskul aturis spazmiasas
nawl avis muskul aturis dambli isas

//// nawl avebis meqanikuri gauval oba viTardeba
nawl avebis sisxl ZarRvebis Trombozisas
*Sexorcebissas mucl is RruSi
nawl avis muskul aturis spazmiasas
nawl avis muskul aturis dambli isas

//// nawl avebis @dinamiuri# gauval oba viTardeba
*nawl avis muskul aturis spazmiasas
nawl avis invaginacissas
nawl avebis sisxl ZarRvebis Trombozisas
nawl avis simsi vniasas

//// nawl avebis hemostazuri gauval oba viTardeba
nawl avebis muskul aturis spazmiasas
nawl avis invaginacissas
hirSprungis daavadebis dros
*nawl avebis sisxl ZarRvebis Trombozisas

//// daasaxel eT zogadi movl enebi, roml ebic SeiZl eba ganviTardes gauval obis
dros
SegubebiTi hiperemi a
hipertenzia
hiperTermia
*dehidratacia

//// gauval obis dros SeiZl eba ganviTardes

*autointoqsikacia nawl avebidan
sisxl is gaTxiereba
arteriul i hipertenzia
hiperTireozi

//// gauval obis dros SeiZl eba ganviTardes
*nawl avis nekrozi
arteriul i hipertenzia
hiperTireozi
hiperTermia

//// nawl avebSi duRil isa da l pobis procesma SeiZl eba gamoiwvios
bul imia
*meteorizmi
siyviTl e
meqano- da qemoreceptorebis gamoTiSva

//// Zl ierma meteorizma SeiZl eba gamoiwvios
meqano- da qemoreceptorebis gamoTiSva
diurezis momateba
*diurezis damuxruWeba
bul imia

//// RviZl is dazianebam sisxl denisken midreki l eba SeiZl eba gamoiwvios
*proTrombinis sinTezis daqveiTebi T
naRvl is warmoqmni momatebi T
naRvl is gamoyofis momatebi T
gl ikogenis warmoqmni momatebi T

//// aqol ias axasiaTebis
*steatorea
disfagia
pol ifagia
faRaraToba

//// aqol ias axasiaTebis
*meteorizmi
disfagia
pol ifagia
faRaraToba

//// kuWqveSa j irkvl is nekrozi da autol izi dakavSirebul i SeiZl eba iyos
*Tormetgoj a nawl avis SigTavsis moxvedrasTan pankreasSi sadinarSi
pankreasSi pepsinis naadrev gaaqtiurebasTan
pankreasSi gastrinis naadrev gaaqtiurebasTan
nawl avis peristal tikis gaZl ierebasTan

//// aqol ia aris
kuWis wenis gamouyofl oba
*naRvl is gamouyofl oba
naRvel mJavebis gadasvl a sisxl Si
naRvel mJavebis gamouyofl oba SardiT

//// aqol ias iwvevs
kuWis wenis gamouyofl oba
*pankreasSi Tavis kibos zewol a naRvl is saerTo sadinrebze
anemia
yabzoba

//// aqol ias iwvevs
*hepatiti
anemia
naRvl is buStSi kenWis gaCena
yabzoba

//// aqol iis dros
• irRveva cximis monel eba
kuWis weniSi maril mJavas deficitia
viTardeba faRaraToba
viTardeba anemia

//// aqol iis dros
• viTardeba yabzoba
kuWis weniSi maril mJavas deficitia
viTardeba faRaraToba
viTardeba anemia

//// aqol iis dros

ZI ierdeba nawl avebis motorika
viTardeba faRaraToba
• viTardeba steatoria
viTardeba pol ifagia

//// cximis monel ebis darRveva aqol iis dros gamowveul ia
sekretinis aqtivaciis darRveviT
I ipazas aqtivaciit
qol ecistokininis aqtivaciit
• cximis emul girebis darRveviT

//// cximis monel ebis darRveva aqol iis dros gamowveul ia
sekretinis aqtivaciis darRveviT
I ipazas aqtivaciit
qol ecistokininis aqtivaciit
• cximTan I ipazas kontakhtis gaZnel ebiT

//// aqol iis dros gansakuTrebit ZI ier irRveva
aminmJavebis Sewova
wyal Si xsnadi vitaminebis Sewova
• cximSi xsnadi vitaminebis Sewova
rkinis Sewova

//// xangrZI ivi aqol ia sisxl denisken midrekil ebas iwvevs
qol esterinis Sewovis darRvevis gamo
samval entiani rkinis orval entianad gardaqmnis darRvevis gamo
rkinis Sewovis darRvevis gamo
• K-vitaminebis Sewovis darRvevis gamo

////nawl avebSi warmoqmnil i toqsikuri nivTierebebi neutral deba
nawl avis kedel Si transaminirebit
nawl avis kedel Si dekarboqsil irebit
• RviZI Si glukurinis mJavit
nawl avis RruSi motiliniT

//// nawl avebSi warmoqmnil i toqsikuri nivTierebebi neutral deba
nawl avis kedel Si aminooqsidazebit
nawl avis kedel Si dekarboqsil irebit
• RviZI Si gogirdmJavit
nawl avis RruSi motiliniT

//// RviZl is ukmarisobis dros
*irRveva gl ikogenis sinTezi
Zl ierdeba gl ikogenis sinTezi
viTardeba hiperproteiniemia
Zl ierdeba cximis daJangva

//// RviZl is ukmarisobis dros
viTardeba hipoamoniemia
viTardeba haerovani embolia
*viTardeba amoniemia
sisxl Si mci rdeba amoniakis Semcvel oba

//// RviZl is ukmarisobis dros
*viTardeba aminoacidiemia
viTardeba hipoamoniemia
viTardeba haerovani embolia
sisxl Si mci rdeba amoniakis Semcvel oba

//// qol emia iwvevs
taqikardias
arteriul hipertenzias
rkinadeficitur anemias
*arteriul hipotenzias

//// qol emia iwvevs
taqikardias
arteriul hipertenzias
*bradikardias
taqipnoes

//// Sardi muqi l udis ferisaa
hematuriis dros
*meqanikuri siyviTI is dros
aqil iis dros
Saqriani diabetis dros

//// ganaval i aqol iuri SeiZl eba iyos
*meqanikuri siyviTI is dros
hemol izuri siyviTI is dros
nefrozis dros
pankreatitis dros

//// ganaval i hiperqol iuria

meqanikuri siyviTI is dros
*hemol izuri siyviTI is ros
parenqimul i siyviTI is dros
qol ecistitis dros

////meqanikur siyviTI es axasiaTebis
disfagia
*aqol iuri ganaval i
hiperqol iuri ganaval i
taqikardia

////hemol izur siyviTI es axasiaTebis
aqol ia
qol emia
aqil ia
*bil irubinemia arapirdapiri bil irubiniT

//// hemol izur siyviTI es axasiaTebis
proteinuria
taqikardia
aqol ia
*urobil inuria

//// anemia RviZI is ukmarisobis dros viTardeba
*ciankobal aminis deficiitis gamo
meTioninis deficiitis gamo
cximebis deficiitis gamo
naxSirwyl ebis deficiitis gamo

//// sisxl is Sededeba RviZI is ukmarisobis dros qveiTdeba
Sededebis |+ faqtoris deficiitis gamo
A vitaminis Sewovis darRvevis gamo
Sededebis |+++ faqtoris defciitis gamo
*hipofibrinogenemiis gamo

//// RviZI is ukmarisobis dros viTardeba intoqsikacia
*amoniakiT
gastriniT
gl ukoziT
SardovaniT

//// RviZI is ukmarisobis dros
aqtivdeba sisxl is Sededeba

\\ aÉBAOAEÁI OÁOÉIÁIÉÉO ÁOI Ó
\\ OÁIÉIÉO aAOAE OAI ÁÁIÍ ÁÉE ÁÁIÍ UI ×ÉO ÁOI Ó

\\ \\ aÉDI OÁI ODEÁ DI ÉÉOÓÉÉO ×I ÍÆÁ IÉOÈÉÉÁO
\\ UAOÁÉO AOUOÉO AIEÁÁÁÆÁ
\\ ÉEOÉIÉÁÁÉO IÁI aÉO AIEÁÁÁÆÁ
\\ ÉEOÉIÉÁÁÉO IÉÆÁÆÁÆO ÁÆÉÁIÁÁÁÆÁ
\\ ÉEOÉIÉÁÁÉO AI OÁÉÁÁÉO ÁÆÉÁIÁÁÁÆÁ

\\ \\ aÉDI OÁI ODEÁ I ÉÉÁOÓÉÉO ×I ÍÆÁ IÉOÈÉÉÁO
\\ ÉEOÉIÉÁÁÉO AI OÁÉÁÁÉO ÉÆI ÉÉOÁAOÉ ÁÆÉÁIÁÁÁÆÁ
\\ ÉEOÉIÉÁÁÉO AI OÁÉÁÁÉO ÁA IÉÆÁÆÁÆO AOÉÁOI OÉ ÁÆÉÁIÁÁÁÆÁ
\\ ÉEOÉIÉÁÁÉO IÉÆÁÆÁÆO ÉÆI ÉÉOÁAOÉ ÁÆÉÁIÁÁÁÆÁ
\\ UAOÁOABÁÁÉÉO ÁÆÉÁIÁÁÁÆÁ

\\ \\ ÐOI OÁÉI ODEÁ ADEO
\\ aÉDI ÐOI OÁÉIÁIÉÉO UÁÁÁÉ
\\ ÉEOÉIÉÉO IÉÆÁÆÁÆO ÁÆÉÁIÁÁÉO UÁÁÁÉ
\\ OÁIÉIÉO OÉaAOAE OÁÁÁÉ
\\ ÐAOÐOI OÁÉIÁIÉÉO UÁÁÁÉ

\\ \\ IBAÁÁÁ DEÁÉI ÍA×OÉO O aAOÉAEÁAO
\\ AOÓAOÉOÉÉ aÉDI OÁIÆEÁ
\\ ÁEÁOIÉI ODEÁ
\\ ÁOOÉIÍÆÉ
\\ IÉÆÁÉI ÁÁIÉ ÁÉÉAEIÍÆÉ

\\ \\ aÁIÍ OÁÁÉOÉÉ OÉIÁOI IÉO IÁOAIÉÆI OÉ ÉEOÉIÉÉO ÁÁÁÁÁÁÁÉO OAOIÉIÁÉ O OÁÁÉAOÉ
IÍ IABÉÉÁI AÓ
\\ EOÍ IÁI DEAOOÉIÉO ÁA×ÉYÉOÉ
\\ ×ÉAOÉIÍ ÉÉÆÉO ÁÆEOÁOÍÁA
\\ OOI ÉÉIÁÆAO OÉaAOAA
\\ ÐOI ÉI IÁAÓOÉIÉO OÉaAOAA

\\ \\ AI OÉÁÉO OÁÆOÉÉÉ aI OIÍ IÉO OÉaAOAA ÉBÁÁO
\\ ÁOOÉIÍÆÉ
\\ aÉBAOaÉÁOÁOÁO
\\ aÉDI ÁÉÉÉÁI AO
\\ AOÓAOÉOÉÉ aÉDI OÁIÆAO

\\ \\ ÐI ÉÉOÓÉÉÁ ÁÉÉAOÁÁÁ
\\ aÉBAOÁÉÉÉÁIÉÉO ÁOI Ó
\\ I ÐOÉOI YÉIÉO OÁI YEOÁÁÉOÁO
\\ ÉEOÉIÉÉO IÉÆÁÆÁÆO AOÁAÐOÉOÉI AEOAO AÁa-ÉO IÉI AOÉ
\\ ÁÁÁIÍ aÉDI ×ÉÆÉO ÁÆÉÁIÁÁÉOÁO

/// pol iuria aris

xSiri Sardva
Rami diurezis siWarbe
Sardis gamoyofis Semcireba
*Sardis didi raodenobiT gamoyofa

//// ol iguria aris
xSiri Sardva
Sardis gamouyofl oba
mtkivneul i Sardva
*Sardis gamoyofis Semcireba

//// anuria aris
diurezis Semcireba
diurezis momateba
Rami diurezis siWarbe
*Sardis gamoyofis Sewyveta

//// pol akiuria aris
diurezis Semcireba
diurezis momateba
Rami diurezis siWarbe
*xSiri diurezi

//// niqturia aris
xSiri diurezi
*Rami diurezis siWarbe
diurezis Sewyveta
diurezis Semcireba

//// dizuria aris
*mtkivneul i Sardva
diurezis Semcireba
diurezis gazrda
diurezis Sewyveta

////pol akiuria axasiaTeb
qronikul gl omerul onefrits
gul is dekompensacias
*Sardis buStis anTebas
mwvave gl omerul onefrits

//// niqturia axasiaTeb
hiperal dosteronizms
*gul is dekompensacias

reninis hiperproduccias
Sardis buStis anTebas

//// pirvel adi Sardis gamoyofa mci rdeba
*Tirkml is gorgl is kapil arebSi wnevis dacemisas
Tirkml is gorgl is kapil arebSi wnevis momatebisas
Tirkml is sisxl momaragebis momatebisas
kafsul Siga wnevis Semcirebisas Tirkml is gorgl ebSi

//// pivel adi Sardis gamoyofa mci rdeba
*funqcionirebadi gorgl ebis raodenobis Semcirebisas
sisxl is kol oidur-osmosuri wnevis daqvei Tebissas
Tirkml is gorgl is kapil arebSi wnevis momatebisas
reninis saWarbissas

//// pirvel adi Sardis gamoyofa mci rdeba
*sistemuri arteriul i hipotenziis dros
reninis deficitissas
sisxl is pl azmis momatebisas
hipoproteinemiis dros

//// pirvel adi Sardis gamoyofa mci rdeba
*Tirkml ebis gorgl ebis daziane bissas
reninis deficitissas
hiperproteinemiis dros
sisxl is kol oidur-osmosuri wnevis daqvei Tebissas

//// aRniSneT organul i proteinuriis mizezi
hiperproteinemia
*mwave gl omerul onefriti
metaboluri al kal ozi
hipoproteinemia

//// aRniSneT funqciuri proteinuriis mizezi
*mZime fizikuri muSaoba
hiperglikemia
mwave gl omerul onefriti
hipoproteinemia

//// Tirkml is gorgl ebis eqskreciul i funqcis darRvevissas vi Tardeba
*azotemia
hiposulfatemia
hipoacidemia
hipofosfatemia

//// natriumis da wyl is reabsorbacia pirvel adi Sardidan Zl ierdeba
hipergl ikemiisas
al dosteronis deficitisas
*hiperal dosterinemiis dros
reninis deficitisas

//// gl ukozuria hipergl ikemiis gareSe SeiZl eba ganviTardes
*Tirkml is epiTel is dazianebebisas
uSaqro diabetes dros
proteinuriis dros
azotemiis gamo

//// proteinuriam SeiZl eba gamoiwvios
eqsiKOzi
*SeSupeba
niqturia
sisxl is kol oidur-osmosuri wnevis gazrda

//// tubul uri proteinuria viTardeba
Tirkml is gorgl ebebis dazianebebisas
piel itis dros
*Tirkml is mil akebis dazianebebisas
hiperstenuriisas

//// tubul uri proteinuria viTardeba
*damwvrobis dros
hipergl ikemiis dros
hipogl ikemiis dros
reninis siWarbisas

//// Tirkml ismieri aminoaciduria viTardeba
hipoaminoacidemiis dros
*Tirkml is mil akebSi aminmJavebis reabsorbciisTvis saWiro fermentebis
deficitisas
hipoproteinemiis dros
vil ebrandis sindromis dros

//// mil akovani acidozi viTardeba
pol iuriis dros
*fankonis sindromis dros
vil ebrandis sindromis dros
SardsawveTis dazianebebis dros

//// proteinuria aris
hipoproteinemiis Sedegi
reninis siWarbis Sedegi
*Tirkml is mil akebis dazianebis Sedegi
paraproteinemiis Sedegi

//// Tirkml is dazianebis maCvenebel ia
qol al uria
*hematuria
niqturia
bil i rubinemia

//// hiperazotemia iwvevs
arteriul hipertenzias
hiperglikemias
*Rebinebas
eqsi kozs

//// mwvave gl omerul onefrits axasiaTebis
reninis deficiiti
hipotenzia
hiperproteinemia
*hematuria

////mwvave gl omerul onefrits axasiaTebis
eqsi kozi
*SeSupeba
hipotenzia
niqturia

//// piel onefritis ganviTarebas xel s uwyobs
poliuria
*SardsawveTis Seviwroveba
niqturia
xSiri Sardva

////mwvave piel onefritis axasiaTebis
arteriul i hipotenzia
eqsi kozi
mil akovani al kal ozi
*arteriul i hipertenzia

//// piel onefritis axasiaTebis

*pol akiuria
hiperstenuria
niqturia
hiperglikemia

//// pielonefrits axial Tebs

*SeSupeba
hiperlipidemia
Kavitinozi
niqturia

//// pielonefrits axial Tebs

*Tirkmlis koncentraciis unaris dar Rveva
arteriuli hipotenzia
mikrovaskulozia
hiperglikemia

//// arnitsneT zogadi movlenatirkmlis daavadebis dros
siyvitile

*hiperazotemia
arteriuli hipotenzia
hiperkoagulacia

//// anemias meqanizmsi Tirkmlis ukmarisobis dros monawileobs

*eritropoetinis defitsiti
eritropoetinis siWarbe
eritropoetinis inhibitoris defitsiti
retikulocitozi

//// Tirkmlis mwvave ukmarisobas axial Tebs

niqturia
policitemia
*Rebineba
mikrovaskulozia

//// Tirkmlis mwvave ukmarisobas axial Tebs

niqturia
policitemia
*krunCxva
mikrovaskulozia

//// Tirkmlis mwvave ukmarisobas axial Tebs

niqturia
policitemia

*acidozi
al kal ozi

////Tirkml is mwvave ukmarisobas axasiaTeb
pol icitemia
pol iuria
al kal ozi
*ol iguria

\\ \\ aT OIT TEAOADEA EBAAA
\\ \\ OAOAAATEOE aeOEAEO TEAO aT OIT TEO AAIT UI xEO AAEOAOITAO
\\ \\ OAOAAATEOE aeOEAEO TEAO aT OIT TEO AAIT UI xEO IT IAOAAAO
\\ \\ aT OIT TEO ETAOEAAYEO
\\ \\ OAOAAATEOE aeOEAEO aEDAODEAEAO

\\ \\ OUAOTI AEAAAOE AEAOAAA
\\ \\ ATOEAEOOAEOE aT OIT TEO ETAOEAAYEO AAP EAOAAEOAO
\\ \\ ATOEAEOOAEOE aT OIT TEO AAIT UI xEO IT IAOAAEOAO
\\ \\ T OEOI YETEO OATYEOAAEOAO
\\ \\ AAAITI aEIT xEEO AAEEITAAEOAO

\\ \\ aEDAODEAOEEOAI AE EBAAA
\\ \\ xEAOI AOE T OAIT AEOOI xEAO
\\ \\ aEIT OAITAEO
\\ \\ T OAIT EEAOAAEO AAOAOTIAO T OAIT AEAOAAA
\\ \\ EA EYEOITEO UEA AAAAO PAEAAOE

\\ \\ AA EIT AE AIT EOOOE AE OOI xEO OA x OPAE EA
\\ \\ aEIT xEEO AI IAIT OOI OOE aT OIT TEO AA x EYEOE
\\ \\ aEIT xEEO AAAITI EI OOEI OOI OOE aT OIT TEO AA x EYEOE
\\ \\ aEIT xEEO AIT OOI IAAEAEOOE AEOEAAEO AAEEITAAA
\\ \\ xAOEAOOE aeOEAEO AAEEITAAA

\\ \\ AE OI IAAA EEO AOI O
\\ \\ PE EAOAAA YEEO AAUEA
\\ \\ AE EAOAAA aEIT AE EAITEA
\\ \\ PE EAOAAA YEEO OE I EAE
\\ \\ AE EAOAAA aEDA OEA EY EIT EA

\\ \\ AITAIT EOOE UEUAEO AIT AEEAOAAAUE IT IABE E AI AO
\\ \\ EA EYEOITEO OEA OAA T OAAIT EITUE
\\ \\ xAOEAOOE aeOEAEO aEIT DE AEA
\\ \\ OAEAAAUE EA EYEOITEO AA x EYEOE
\\ \\ EEOAI OOI OOE aT OIT TEO EI IBAIT OAYEOOE aEDA OBOI AOBYEA

//// endokrinul i jirkvl ebis funqciis central ur regul aciaSi monawil eobs
naTxemi

*hipoTal amusi

Tirkmel zeda jirkval i

Tavis tvinis Subl is wil i

////hipoTal amusis neirosekreciul i uj redebis statinebi

*miekuTvnebian @ril izing-faqtorebs#

miekuTvnebian citostatikebs

astimul ireben hipofizis mier tropul i hormonebis gamoyofas

uSual od moqmedeben sixl is hidrodinamikur wnevaze

//// hipoTal amusis neirosekreciul i uj redebis l iberinebi

miekuTvnebian l ipoproteinebs

miekuTvnebian histaminis l iberatorebs

astimul ireben l iberkunis jirkvl ebs

*astimul ireben hipofizis mier tropul i hormonebis gamoyofas

//// hormonis periferiul i aqtivoba irRveva

*homonis SemkavSirebel i sixl is cil is deficitisas

l iberinebis siWarbisas

homonis aqtivaciis uj redSi

l iberinis deficitisas

//// hormonis periferiul i aqtivoba irRveva

*autoantisxeul ebis gaCenisas hormonis mimarT

l iberinebis siWarbisas

homonis aqtivaciis uj redSi

l iberinis deficitisas

////akromegal iis dros

*matul obs gl ukagonis warmoqmna

matul obs gth-s warmoqmna

mci rdeba insul inis warmoqmna

mci rdeba gl ukagonis warmoqmna

//// vazopresini

*amci rebs diurezs

i wvevs hiperkal i emias

amci rebs periferiul winaaRmdegobas sixl is nakadis mimarT

zrdis diurezs

//// vazopresini

*aviwrovebs periferiul arteriebs

iwvevs hiperkal iemias

amcirebs periferiul winaarmdegobas sisxl is nakadis mimarT

iwvevs hipotenzias

//// adh-is Semcvel obam sisxl Si SeiZl eba moimatos

*neirohipofizis hiperfunqciisas

adenohipofizis hipofunqciisas

al kal ozis dros

vazopresinis sekreciis daqveitebisas

//// adh-is Semcvel obam sisxl Si SeiZl eba moimatos

*RviZl is cirozis dros

adenohipofizis hipofunqciisas

al kal ozis dros

vazopresinis sekreciis daqveitebisas

//// adh-is Semcvel obam sisxl Si SeiZl eba moimatos

*orsul Ta toqsikozis dros

adenohipofizis hipofunqciisas

al kal ozis dros

vazopresinis sekreciis daqveitebisas

//// adh-is siWarbe monawil eobs

eqsikozis paTogenezSi

*arteriul i hipertenziis zogierTi formis paTogenezSi

hipogl ikemiis paTogenezSi

Tarteriul i hipotenziis paTogenezSi

//// adh-is gamoyofa mcirdeba

Tirkmel zeda jirkvl is dazianebisas

*hipoTal amusis supraoptikuri birTvebis dazianebisas

hipofizis ventrol ateral uri birTvebis dazianebisas

adenohipofizis dazianebisas

//// uSaqro diabeti viTardeba

adh-is gamoyofis momatebisas

oqsi tocinis Semcirebisas

*adh-is gamoyofis Semcirebisas

adenohipofizis dazianebisas

//// uSaqro diabeti viTardeba
adh-is gamoyofis momatebisas
oqsi tocinis Semcirebisas
*adh-is inaqtivaciis gaZl ierebisas
adenohipofizis dazianebisas

//// Tireotoqsikozis paTogenezSi SeiZl eba monawil eobdes
*adrenoreceptorebis mgrZnobel obis momateba
hipoTerma
adenohipofizis hipofunqcia
somatotropul i hormonis siWarbe

//// Tireotoqsikozis paTogenezSi SeiZl eba monawil eobdes
*imunuri procesi
hipoTerma
adenohipofizis hipofunqcia
somatotropul i hormonis defici ti

////Tireotoqsikozis paTogenezSi SeiZl eba monawil eobdes
*Tiroqsinis hiperproduqcia
hipoTerma
adenohipofizis hipofunqcia
somatotropul i hormonis siWarbe

//// Tireotoqsikozis dros aRiniSneba
ZiriTadi cvl is daqveiTeba
*ZiriTadi cvl is gaZl iereba
bradikardia
Jangbadis moxmarebis Semcireba

//// basedovis daavadebas axasiaTebis
bradikardia
*arteriul i hipertenzia
simuqne
arteriul i hipotenzia

//// basedovis daavadebas axasiaTebis
bradikardia
*egzofTal mi
simuqne
arteriul i hipotenzia

//// basedovis daavadebas axasiaTebis
bradikardia
*tremori
simsuqne
arteriul i hipotenzia

//// basedovis daavadebas axasiaTebis
*taqikardia
bradikardia
arteriul i hipotenzia
hipogl ikemia

//// basedovis daavadebas axasiaTebis
nistagmi
• tremori
arteriul i hipotenzia
ZiriTadi cvl is daqveiTeba

//// Tireoidul i hormonis toqsikuri gavli enis meqanizmi monawil eobs
*energiis akumul irebis daqveiTeba
mitoqondriebis membranebis ganvli adobis daqveiTeba
ZiriTadi cvl is Semcireba
energiis akumul irebis momateba

//// Tireotoqsikozis gavli eni T
Zi ierdeba cil is anabol izmi
*Zi ierdeba cil is katabol izmi
azotovani balansi dadebiTia
qveiTdeba gl ikogenezi

//// Tireotoqsikozis dros
viTardeba hipogl ikemia
*viTardeba hiperogl ikemia
viTardeba hipoqol esterinemia
mcirdeba insul inazas aqtivoba

//// sigamxdris meqanizmi Tireotoqsikozis dros monawil eobs
*simpatikuri gavli enis siWarbe
parasimpatikuri gavli enis siWarbe
cximis deponireba
cximis Jangvis Semcireba RviZi Si

//// sigamxdris meqanizmi Tireotoqsikozis dros monawil eobs

*cximis mobil izeba depo organoebidan
parasimpatikuri gavl enis siWarbe
cximis deponireba
cximis Jangvis Semcireba RviZI Si

//// @Tireotoqsikuri gul is# Camoyal ibebaSi monawil eobs
miokardis mgrZnobel obis daqvei Teba kateqol ami nebis mi mar T
miokardSi atf-is Semcvel obis momateba
parasimpatikuri gavl enis siWarbe
*miokardSi atf-is Semcvel obis daqvei Teba

//// hipoTireozs iwvevs
kal iumis defici ti
*iodis defici ti
natriumis defici ti

adenohipofizis hiperfunqcia
//// hipoTireozs axasiaTebis
zrdis aCqareba
sxoul is temperaturis momateba
*sxoul is temperaturis daqvei Teba
tremori

//// fariseburi j irkvl is hipofunqcia iwvevs
bazedovis daavadebas
adisonis daavadebas
*miqsedemas
egzofthal ms

//// fariseburi j irkvl is hipofunqcia iwvevs
bazedovis daavadebas
adisonis daavadebas
*kretinizms
egzofthal ms

//// kretinizms axasiaTebis
*ol igofrenia
naadrevis sqesobrivi momwifeba
hiperglikemia
sxoul is temperaturis momateba

//// kretinizms axasiaTebis
*sqesobrivi ganuviTarebl oba

naadrevi sqesobrivi momwifeba
hipergl ikemia
sxeul is temperaturis momateba

//// miqsedemis dros
gaZl ierebul ia JangviTi procesebi
*daqveiTebul ia JangviTi procesebi
maRal ia sasqeso potencial i
viTardeba dehidratacia

//// miqsedemis dros
gaZl ierebul ia JangviTi procesebi
*qsovil ebSi grovdeba wyal i
maRal ia sqesobrivi potencia
viTardeba dehidratacia

//// miqsedemis dros
*viTardeba l orwovani SeSupeba
viTardeba hipergl ikemia
Zl ierdeba nivTierebaTa cvl a
maRal ia sqesobrivi potenacial i

//// endemuri Ci yvis ganviTarebaSi monawil eobs
*sakvebSi da wyal Si iodis defici ti
Tireotropul i hormonis hipoproduqcia
kal ciumis defici ti
farisebri j irkvl is hipopl azia

//// endemuri Ci yvis ganviTarebaSi monawil eobs
*Tireotropul i hormonis kompensaci uri hiperproduqcia
akth-siWarbe
farisebri j irkvl is hipopl azia
sakvebSi kal ciumis defici ti

//// paraThormonis siWarbisas
izrdeba kal ciumis Cal ageba Zvl ebSi
*viTardeba hipokal ciemia
muxruWdeba osteokl astebis warmoqmna
stimul irdeba osteokl astebis gardaqmna osteobl astebad

//// hiperparaTireozs axasiaTebis
hipokal ciemia
*hiperkal ciemia
fosforis rezorbciis gaZl iereba pirvel adi Sardidan

\\ \\ \AA\O\T\ O\A\Y\A\B\O\T\ O\A\A\A\A\A\

\\ \\ \A\O\O\A\A\A\O\ O\A\A\A\A\A\A\ B\A\A\A\A\A\A\A\ \AA\O\A\A\A\A\A\O\ \AA\A\A\A\A\A\A\ \A\B\A\A\A\A\O\

\\ \\ \O\A\A\A\A\O\A\A\ \AA\T\A\A\A\O\

\\ \\ \Y\A\T\O\O\A\A\A\O\O\ \AA\T\A\A\A\O\

\\ \ \A\O\T\A\ \AA\T\A\A\A\O\

\\ \\ \A\O\O\O\O\A\B\A\O\A\T\A\A\O\A\A\ \AA\T\A\A\A\O\

\\ \\ \A\A\A\O\ O\A\A\A\O\ \O\A\O\T\ O\ \AA\A\A\A\O\A\O\ T\T\ \A\O\T\ \O\A\A\T\T\ \A\A\O\A\A\A\A\A\A\O\

\\ \\ \O\O\T\A\A\O\ \O\A\T\A\O\O\T\A\A\A\

\\ \ \O\O\T\A\A\O\ \O\O\O\A\ \O\A\B\U\A\A\O\A\

\\ \\ \A\O\O\A\O\O\A\A\O\O\ \B\T\A\A\O\ \O\A\T\A\O\O\T\A\A\A\

\\ \\ \O\A\A\A\A\A\A\

//// enis I eikopl akia SeiZI eba ganviTardes

/// B₁₂ avitaminosis dros

/// sprus dros

// piris Rrus meqanikuri travmis dros

/// hunteris gl ositis dros

//// piris Rrus I orwovani garsis dekubital uri wyl ul ebi SeiZI eba ganviTardes

/// parodontozis dros

// qronikul i travmis Semdeg

/// I eikopl akiis Sedegad

/// mwwave gingivitis dros

//// stomatol ogiur praqtikaSi SeiZI eba ganviTardes al ergia

/// bJenis komponentebze

// saanesTezio saSual ebebze

/// borebis gamoyenebisas

/// kbiI is eqstraqciaze

//// piris Rrus dacvis faqtorebs miekuTvneba

// - I izinebi

/// hemol izinebi

/// - I izinebi

/// eriTrol izinebi

/// piris Rrus I orwovani garsis I eikopl akia xasiaTdeba

/// I orwovani ganl evi T
/// I orwovani mwvave anTebi T
/// eri Temi T
// epi Tel iumis garqovanebi T

//// enis simsi vneebi dan yvel aze xSi rad vi Tar deba
/// hemangi oma
// papi l oma
/// I imfangi oma
/// fibroma

//// enis I orwovani garsis atrofi is meqanizmSi rkinadeficituri anemi is dros
monawil eobs
/// antioqsidaciuri fermentebis siWarbe
// citoqromoqsidazas defici ti
/// suqcinatdehidrogenazas aqtivobis momateba
/// I izocimis defici ti

//// B-j gufis vitaminebis defici ti xasiaTdeba
/// piri s Rrus I orwovani garsis hiperpl azi i T
// enis dvril ebis atrofi i T
/// aftebis gaqrobi T
/// sagemovno bol qvebis raodenobis momatebi T

//// periodontitis umTavresi gamomwvevia
/// soko
/// hel ikobaqteria
/// kurSmanis spiral ebi
// streptokoki

//// periodontitis paTogenezSi monawil eobs
/// osteokl astebis funqci is daTrgunva
/// perinevriti
/// osteokl asebis aqtivacia
/// periarteri i ti

//// RrZil ebis ganl eva axasiaTebS
/// fl urozs
/// pul pits
// parodontits
/// xeil its

//// pul pitis uxSiresi mizezia
// hemol izuri streptokoki
/// gingiviti
/// spiroqetozi
/// kbil ebis amoWra

//// cxel ebas axasiaTebS
/// parodontozi
/// hipersal ivacia
/// hunteris gl ositi
// hiposal ivacia

//// B₁₂ – da fol ideficituri anemiebis dros piris Rrus dazianebaSi monawil eobs
/// I orwovaniS epiTel uri uj redebis hipertrofia
/// imunuri uj redebis aqtivacia
/// I eikocitozi
// I orwovaniS epiTel uri uj redebis gamravl ebis daTrgunva

//// Saqrian diabets xSirad axasiaTebS
/// enis I orwovaniS garsis dvril ebis hipertrofia
/// hipersal ivacia
// qserostomia
/// mikrosixl ZarRvTa bazal uri membranis gaTxel eba