

SEQUENCE LISTING

<110> MeiraGTx UK II Limited
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Alexandria, Forbes
Kevin G., Liu
Ji-In, Kim

<120> APTAMERS THAT BIND THIAMINE ANALOGS AND DERIVATIVES

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<140> US 62/994,135
<141> 2020-03-24

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<170> PatentIn version 3.5

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<221> misc_feature
<222> (49)..(49)
<223> n is a, c, g, or u

<400> 48
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gauaaugccg cugcagggag u 81

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<211> 81
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<220>
<223> 14G4

<400> 49
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gauaaugccg ccgcagggag u 81

<210> 50
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 <212> RNA
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 <220>
 <223> 1D10

 <400> 50
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 gauaaugccg ccgcaggag u 81

 <210> 51
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 <220>
 <223> 3H4

 <400> 51
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 gauaaugccg cugcaggag u 81

 <210> 52
 <211> 81
 <212> RNA
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 <220>
 <223> 3F10

 <400> 52
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 gauaaugccg ccgcaggag u 81

 <210> 53
 <211> 80
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> 3H9

 <400> 53
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 auaaugccgc cgcaggag u 80

<210> 54
<211> 81
<212> RNA
<213> Artificial Sequence

<220>
<223> 4G2

<400> 54
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gauaaugccg ccgcaggag u 81

<210> 55
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<212> RNA
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<220>
<223> 6D2

<400> 55
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gauaaugccg ccgcaggag u 81

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<212> RNA
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<223> 6B4

<400> 56
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gauaaugccg ccgcaggag u 81

<210> 57
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<220>
<223> 4H2

<400> 57
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gauaaugccg ccgcagggag u 81

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gauaaugccg ccgcagggag u 81

<210> 59
<211> 81
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<220>
<223> 6G12

<400> 59
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gauaaugccg ccgcagggag u 81

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<220>
<223> 8F1

<400> 60
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auaaugccgc cgagggagu 80

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<223> 10A7

<400> 61
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gauaaugccg cugcagggag u 81

<210> 62
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<400> 62
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gauaaugccg cugcagggag u 81

<210> 63
<211> 81
<212> RNA
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<220>
<223> 12G7

<400> 63
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gauaaugccg cugcagggag u 81

<210> 64
<211> 81
<212> RNA
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<220>
<223> 12H3

<400> 64
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gauaaugccg cugcagggag u 81

<210> 65
<211> 81
<212> RNA
<213> Artificial Sequence

<220>

<223> 13H7

<400> 65

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gauaaugccg cugcagggag u 81

<210> 66

<211> 81

<212> RNA

<213> Artificial Sequence

<220>

<223> 13B6

<400> 66

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gauaaugccg cugcagggag u 81

<210> 67

<211> 81

<212> RNA

<213> Artificial Sequence

<220>

<223> 15A5

<400> 67

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gauaaugccg cugcagggag u 81

<210> 68

<211> 81

<212> RNA

<213> Artificial Sequence

<220>

<223> 15D10

<400> 68

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gauaaugccg cugcagggag u 81

<210> 69

<211> 81

<212> RNA

<213> Artificial Sequence

<220>

<223> 15F9

<400> 69

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gauaaugccg cugcagggag u 81

<210> 70

<211> 81

<212> RNA

<213> Artificial Sequence

<220>

<223> 16E5

<400> 70

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gauaaugccg cugcagggag u 81

<210> 71

<211> 81

<212> RNA

<213> Artificial Sequence

<220>

<223> 16G8

<400> 71

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gauaaugccg cugcagggag u 81

<210> 72

<211> 81

<212> RNA

<213> Artificial Sequence

<220>

<223> 16G6

<400> 72

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gauaaugccg cugcagggag u 81

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<211> 81

<212> RNA
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 <223> 17E2

 <400> 73
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 gauaaugccg cugcagggag u 81

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 <220>
 <223> 17G1

 <400> 74
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 gauaaugccg cugcagggag u 81

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 <220>
 <223> 17D3

 <400> 75
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 gauaaugccg cugcagggag u 81

 <210> 76
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 <220>
 <223> 17F5

 <400> 76
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<210> 77
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 <212> RNA
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 <220>
 <223> 17G3

 <400> 77
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 <210> 78
 <211> 81
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> 18G9

 <400> 78
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 gauaaugccg cugcaggag u 81

 <210> 79
 <211> 50
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> modified DHFR exon 2

 <400> 79
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 <210> 80
 <211> 10
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> U1 snRNP binding site (consensus site)

 <400> 80
 caggtaagta 10

 <210> 81
 <211> 10

<212> RNA
<213> Artificial Sequence

<220>
<223> U1 snRNP binding site (consensus site)

<400> 81
cagguaagua 10

<210> 82
<211> 2305
<212> DNA
<213> Artificial Sequence

<220>
<223> TPPz riboswitch

<400> 82
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gcttttacag atgcacatat cgaggtggac atcacttacg ctgagtactt cgaaatgtcc 180
gttcggttgg cagaagctat gaaacgatat gggctgaata caaatcacag aatcgtcgta 240
tgcagtgaag actctcttca attctttatg ccggtgttgg gcgcgttatt tatcggagtt 300
gcagttgctc ccgcgaacga catttataat gaacgtgaat tgctcaacag tatgggcatt 360
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aaaaagctcc caatcatcca aaaaattatt atcatggatt ctaaacgga ttaccaggga 480
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gggagaagta acaggggtaca catattgacc aaatcagggt aattttgcat ttgtaatttt	1140
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cgttgaacct gatcaggcta atacctgcga agggaaacaca ttacgcacca ttctaaagaa	1440
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cgттаатcaa agaggcgaac tgtgtgtgag aggtcctatg attatgtccg gttatgtaaa	1860
caatccggaa gcgaccaacg ccttgattga caaggatgga tggctacatt ctggagacat	1920
agcttactgg gacgaagacg aacacttctt catcgttgac cgcctgaagt ctctgattaa	1980
gtacaaaggc tatcagggtg ctcccgctga attggaatcc atcttgctcc aacaccccaa	2040
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cagtcaagta acaaccgcga aaaagttgcg cggaggagtt gtgtttgtgg acgaagtacc	2220
gaaaggtctt accggaaaac tcgacgcaag aaaaatcaga gagatcctca taaaggccaa	2280
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 <211> 2289
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> TPPm riboswitch

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gctttttacag atgcacatat cgagggtggac atcacttacg ctgagtactt cgaaatgtcc	180
gttcggttgg cagaagctat gaaacgatat gggctgaata caaatcacag aatcgtcgta	240
tgcagtgaag actctcttca attcttttatg ccggtgttgg gcgcgttatt tatcggagtt	300
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aaaaagctcc caatcatcca aaaaattatt atcatggatt ctaaaacgga ttaccaggga	480
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tttgtgccag agtccttcga tagggacaag acaattgcac tgatcatgaa ctctcttgga	600
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catgccagag atcctatttt tggcaatcaa atcattccgg atactgcatg ttttaagtgtt	720
gttccattcc atcacggttt tggaatgttt actacactcg gatatttgat atgtggattt	780
cgagtcgtct taatgtatag atttgaagaa gagctgtttc tgaggagcct tcaggattac	840
aagattcaaa gtgcgctgct ggtgcccaacc ctattctcct tcttcgcaa aagcactctg	900
attgacaaat acgatttatc taattttacac gaaattgctt ctggtggcgc tcccctctct	960
aaggaagtcg gggaagcggg tgccaagagg ttccatctgc caggatatcag ggtgagtcta	1020
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cacggaaaga cgatgacgga aaaagagatc gtggattacg tcgccagtca agtaacaacc	2160
gcgaaaaagt tgcgcggagg agttgtgttt gtggacgaag taccgaaagg tcttaccgga	2220
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gccgtgtaa	2289

<210> 84
 <211> 2296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 14G4 riboswitch

<400> 84	
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gcttttacag atgcacatat cgaggtggac atcacttacg ctgagtactt cgaaatgtcc	180
gttcggttgg cagaagctat gaaacgatat gggctgaata caaatcacag aatcgtcgta	240
tgcagtgaag actctcttca attctttatg ccggtgttgg gcgcgttatt tatcggagtt	300
gcagttgcgc ccgcgaacga catttataat gaacgtgaat tgctcaacag tatgggcatt	360
tcgcagccta ccgtggtgtt cgtttccaaa aaggggttgc aaaaaatttt gaacgtgcaa	420
aaaaagctcc caatcatcca aaaaattatt atcatggatt ctaaaacgga ttaccaggga	480
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tttgtgccag agtccttcga tagggacaag acaattgcac tgatcatgaa ctctcttgga	600
tctactggtc tgcctaaagg tgtcgtctg cctcatagaa ctgcctgcgt gagattctcg	660

catgccagag atcctatttt tggcaatcaa atcattccgg atactgcat ttttaagtgtt	720
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cgagtcgtct taatgtatag atttgaagaa gagctgtttc tgaggagcct tcaggattac	840
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ctatcaggtg gctcccgtg aattggaatc catcttgctc caacaccca acatcttcga	2040
cgcaggtgtc gcaggtcttc ccgacgatga cgccggtgaa cttcccgcg ccgttgttgt	2100
tttggagcac ggaaagacga tgacggaaaa agagatcgtg gattacgtcg ccagtcaagt	2160
aacaaccgcg aaaaagttgc gcggaggagt tgtgtttgtg gacgaagtac cgaaaggtct	2220
taccggaaaa ctcgacgcaa gaaaaatcag agagatcctc ataaaggcca agaagggcgg	2280

aaagatcgcc gtgtaa

2296

<210> 85

<211> 579

<212> DNA

<213> Artificial Sequence

<220>

<223> Con8-Epo

<400> 85

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ggcctcccag tcctctgtgc tccccacgc ctcatctgcg acagtcgagt tctggagagg	120
tacatcttag aggccaagga ggcagaaaat gtcacgatgg gttgtgcaga aggtcccaga	180
ctgagtgaat atattacagt cccagatacc aaagtcaact tctatgcttg gaaaagaatg	240
gaggtggaag aacaggccat agaagtttgg caaggcctgt ccctgctctc agaagccatc	300
ctgcaggccc aggccctgct agccaattcc tcccagccac cagagaccct tcagcttcat	360
atagacaaag ccatcagtgg tctacgtagc ctcaactcac tgcttcgggt actgggagct	420
cagaaggaat tgatgtcgcc tccagatacc accccacctg ctccactccg aacactcaca	480
gtggatactt tctgcaagct cttccgggtc tacgccaact tcctccgggg gaaactgaag	540
ctgtacacgg gagaggtctg caggagaggg gacaggtga	579

<210> 86

<211> 1221

<212> DNA

<213> Artificial Sequence

<220>

<223> Epo-3H4

<400> 86

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ggcctcccag tcctctgtgc tccccacgc ctcatctgcg acagtcgagt tctggagagg	120
tacatcttag aggccaagga ggcagaaaat gtcacgatgg gttgtgcaga aggtcccaga	180
ctgagtgaat atattacagt cccagatacc aaagtcaact tctatgcttg gaaaagaatg	240
gaggtggaag aacaggccat agaagtttgg caaggcctgt ccctgctctc agaagccatc	300
ctgcagggtg agtctatggg acccttgatg ttttctttcc ctttcttttc tatggttaag	360

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cctccagata ccaccccacc tgctccactc cgaacactca cagtggatac	1140
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<220>
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<220>
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 <212> DNA
 <213> Artificial Sequence

<220>
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<210> 90
 <211> 2129
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> luci-Con1

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gcagttgcgc ccgcgaacga catttataat gaacgtgaat tgctcaacag tatgggcatt	360
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taccgaaagg tcttaccgga aaactcgacg caagaaaaat cagagagatc ctcataaagg	2100
ccaagaaggg cggaagatc gccgtgtaa	2129

<210> 91

<211> 2295

<212> DNA
<213> Artificial Sequence

<220>
<223> luci-3H4

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 <213> Artificial Sequence

<220>
 <223> luci-6B4

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 <212> DNA
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<220>
 <223> Luci-15D10

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