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## Appendix A : List of GPO Products Classified by GPO

### 1. BIOLOGICALS

- |  |  |
|--|--|
| 1. CHOLERA VACCINE                                   | 2. DIPHTHERIA AND TETANUS TOXOID (dT)                            |
| 3. DTP VACCINE                                       | 4. FREEZE-DRIED MONOVALENT ANTI-SNAKE<br>VENOM-MALAYAN PIT VIPER |
| 5. FREEZE-DRIED MONOVALENT ANTI-SNAKE<br>VENOM-COBRA | 6. FREEZE-DRIED MONOVALENT ANTI-SNAKE<br>VENOM-RUSSELL'S VIPER   |
| 7. J.E. VACCINE                                      | 8. J.E. VACCINE (FLUID)  |
| 9. MEASLES VACCINE                                   | 10. MONOVALENT ANTI-SNAKE<br>VENOM-RUSSELL'S VIPER               |
| 11. MONOVALENT ANTI-SNAKE VENOM-COBRA                | 12. MONOVALENT ANTI-SNAKE<br>VENOM-MALAYAN PIT VIPER             |
| 13. ORAL POLIO VACCINE                               | 14. PCEC VACCINE   |
| 15. r-DNA HEPATITIS B VACCINE                        | 16. RUBELLA VACCINE  |
| 17. TETANUS ANTITOXIN 1,500 I.U.                     | 18. TETANUS TOXOID   |
| 19. TYPHOID VACCINE                                  |  |

### 2. HERBAL MEDICINES

- |                   |                             |
|-------------------|-----------------------------|
| 1. CHOFIBRIN      | 2. FA-THALAI-CHON. CAPSULES |
| 3. CURMIN CPSULES | 4. MAWANG                   |
| 5. PHAYA YO CREAM | 6. SENNA TEA                |
| 7. PLYGESAL CREAM | 8. SENNA TABLETS            |
| 9. ALOE GEL       | 10. MOSQUITO REPELLANT      |

### 3. HOUSEHOLD MEDICINES

- |                                      |  |
|--------------------------------------|--|
| 1. ALUMINA & MAGNESIA TABLETS        | 2. M. AMMONIUM CARBONATE & GLYCYRRHIZA |
| 3. ANALGESIC BALM                    | 4. AROMATIC AMMONIA SPIRIT             |
| 5. ASAFETIDA TINCTURE                | 6. ASPIRIN TABLETS 300 mg              |
| 7. BROWN MIXTURE                     | 8. BURNS & SACLDS MIXTURE              |
| 9. CALAMINE LOTION                   | 10. CHLORPHENIRAMINE MALEATE TABLETS   |
| 11. COAL TAR OINTMENT                | 12. COMP. AMMONIUM CARBONATE SYRUP     |
| 13. COMPOUND FERROUS SULFATE TABLETS | 14. GENTIAN VIOLET SOLUTION            |
| 15. IODINE TINCTURE                  | 16. ISOPROPYL ALCOHOL                  |
| 17. LIQUID PARAFFIN EMULSION         | 18. MANDL'S PAINT                      |
| 19. MEBENDAZOLE TABLETS              | 20. MILK OF MAGNESIA                   |
| 21. O.R.S.                           | 22. PARACETAMOL SYRUP, PEDIATRIC       |
| 23. PARACETAMOL TABLETS 500 mg       | 24. SENNA TABLETS                      |
| 25. SODAMINT TABLETS                 | 26. STOMACHIC MIXTURE                  |

27. SULFACETAMIDE EYE DROPS
29. TETRACYCLINE EYE OINTMENT
31. TOOTHACHE DROPS
33. SCUBICIDE EMULSION
35. VITAMIN C TABLETS

28. SULPHUR OINTMENT
30. THIMEROSAL TINCTURE
32. WHITFIELD'S OINTMENT
34. VITAMIN B COMPLEX TABLETS
36. MULTIVITAMIN TABLETS

#### 4. CHEMICALS

1. ALUMINIUM HYDROXIDE COMP. GEL
3. CALAMINE BP
5. SODIUM BENZOATE
7. TALCIUM USP

2. BORAX BP (SODIUM BORATE)
4. POTASSIUM CITRATED BP
6. SODIUM CHLORIDE BP
8. ZINC OXIDE BP

#### 5. PHARMACEUTICAL PRODUCTS

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1. AMOXYCILLIN 250 mg, 500 mg         | 2. CEPHALEXIN 250 mg, 500 mg          |
| 3. CLOXACILLIN 250 mg, 500 mg         | 4. CHLORAMPHENICOL 250 mg             |
| 5. LOPERAMIDE 2 mg                    | 6. MEFENAMIC ACID 250 mg              |
| 7. PIROXICAM 10 mg                    | 8. RIFAMPICIN 300 mg, 450 mg          |
| 9. TETRACYCLINE HCl 250 mg            | 10. ADRENALINE BP 1 mg/ml             |
| 11. AMIKACIN 250 mg/2 ml              | 12. AMIKACIN 500 mg/2 ml              |
| 13. AMPICILLIN 1 g                    | 14. AMPICILLIN 250 mg, 500 mg         |
| 15. ATROPINE SULPHATE 0.6 mg/ml       | 16. CALCIUM GLUCONATE BP 10 %         |
| 17. CHLORPHENIRAMINE MALEATE 10 mg/ml | 18. CHLORPROMAZINE USP 50 mg/2 ml     |
| 19. CLOXACILLIN 1 g                   | 20. CLOXACILLIN 500 mg                |
| 21. DEXAMETHASONE PHOSPHATE 4 mg/ml   | 22. DEXTROSE USP 50 %                 |
| 23. DIAZEPAM 10 mg/2 ml               | 24. GENTAMICIN SULPHATE 80 mg/2 ml    |
| 25. LIDOCAINE HCl 1 %                 | 26. LIDOCAINE HCl 2 %                 |
| 27. PEN. G SOD. 5,000,000 I.U.        | 28. QUININE DIHCl 600 mg/2 ml         |
| 29. SODIUM BICARBONATE 7.5 %          | 30. STERILE WATER FOR INJECTION       |
| 31. VITAMIN B1 50 mg/ml               | 32. VITAMIN C 2 ml                    |
| 33. BETAMETHASONE CREAM               | 34. BETAMETHASONE-N CREAM             |
| 35. CLOTRIMAZOLE CREAM                | 36. COMPOUND BENZOIC ACID OINTMENT    |
| 37. FURAZONE OINTMENT                 | 38. GPO ANALGESIC BALM                |
| 39. METHYL SALICYLATE CREAM, COMPOUND | 40. METHYLSALICYLATE OINTMENT 25 %    |
| 41. MICONAZOLE CREAM 2.0 %            | 42. PLYGESAL CREAM                    |
| 43. PREDNISOLONE CREAM                | 44. PREDNISOLONE-N CREAM              |
| 45. ASEPTINE                          | 46. BORIC ACID SOLUTION               |
| 47. GLUTARALDEHYDE SOLUTION 2 %       | 48. HYDROGEN PEROXIDE SOLUTION 20 VOL |
| 49. IPODINE                           | 50. LYSOL                             |
| 51. FORMALDEHYDE                      | 52. GENTIAN VIOLET SOLUTION           |

53. AROMATIC AMMONIA SPIRIT
54. ALMAGEL SUSPENSION
55. ALUMINA AND MAGNESIA SUSPENSION
56. ALUMINUM HYDROXIDE GEL
57. CO-TRIMOXAZOLE SUSPENSION
58. KAOPECTIN MIXTURE
59. LIQUID PARAFFIN EMULSION
60. MEBENDAZOLE SUSPENSION
61. MILK OF MAGNESIA
62. AMOXICILLIN DRY SYRUP 125 mg/5 ml
63. CHLORPHENIRAMINE SYRUP
64. CLOXACILLIN DRY SYRUP
65. COUGH SYRUP
66. GUAFENESIN SYRUP
67. MULTIVITAMIN DRY SYRUP
68. PARACETAMOL COMPOUND SYRUP
69. PARACETAMOL SYRUP
70. PENICILLIN V DRY SYRUP 125 mg/5 ml
71. PIPERAZINE ELIXIR
72. ALBENDAZOLE 200 mg
73. ALLOPURINOL 100 mg
74. ALUMINA AND MAGNESIA
75. ALUMINIUM HYDROXIDE 500 mg
76. AMITRIPTYLINE HYDROCHLORIDE 10 mg, 25 mg
77. ASPIRIN 60 mg, 300 mg
78. BENZHEXOL HCl 2 mg, 5 mg
79. BISACODYL BP 5 mg
80. CALCIUM GLUCONATE 500 mg
81. CHLOROQUINE PHOSPHATE 250 mg
82. CHLORPHENIRAMINE 4 mg
83. CHLORPROMAZINE 100 mg
84. CHLORPROPAMIDE 250 mg
85. CIMETIDINE 200 mg, 400 mg
86. CO-TRIMOXAZOLE
87. CODERGOCRINE MESYLATE
88. CORYSAL
89. CYPROHEPTADINE HCl 4 mg
90. DEXTROMETHORPHAN HBr 15 mg
91. DIAZEPAM 2 mg, 5 mg, 10 mg
92. DIGOXIN NP 0.25 mg
93. DIMENHYDRINATE 50 mg
94. ERYTHROMYCIN STEATATE 250 mg
95. ETHAMBUTOL BP 250 mg, 400 mg, 500 mg
96. FERROUS SULFATE 300 mg
97. FOLIC ACID 5 mg
98. FUROSEMIDE 40 mg
99. GLIBENCLAMIDE 5 mg
100. HALOPERIDOL 2mg, 5 mg
101. HYDROCHLOROTHIAZIDE 50 mg
102. ISONIAZID 100 mg
103. KETOTIFEN 1 mg
104. KETOCONAZOLE 200 mg
105. MEBENDAZOLE 100 mg
106. METHYLDOPA 250 mg
107. METOCLOPRAMIDE 10 mg
108. METRONIDAZOLE 200 mg
109. MULTIVITAMIN
110. NAPROXEN 250 mg
111. NICLOSAMIDE 0.5 mg
112. NICOTINIC ACID 50 mg
113. PARACETAMOL 500 mg
114. PENICILLIN V 125 mg, 250 mg
115. PHENOBARBITONE 30 mg, 60 mg
116. PRAZIQUANTEL 600 mg
117. PREDNISOLONE 5 mg
118. PRIMAQUINE 15 mg
119. PROPRANOLOL 10 mg, 40 mg
120. PROPYLTHIOURACIL 50 mg
121. PYRAZINAMIDE 250 mg
122. QUININE SULPHATE 300 mg
123. SALBUTAMOL 2 mg
124. SODAMINT 300 mg

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|---------------------------------|---------------------------------|
| 125. SODIUM FLUORIDE 0.55 mg    | 126. SULFADOXINE-PYRIMETHAMINE  |
| 127. TERBUTALINE SULFATE 2.5 mg | 128. TRIFLAZINE 5 mg            |
| 129. TRISILICATE                | 130. VITAMIN B COMPLEX          |
| 131. VITAMIN B COMPLEX FORTE    | 132. VITAMIN B1 10 mg, 100 mg   |
| 133. VITAMIN B1-6-12            | 134. VITAMIN B2 5 mg            |
| 135. VITAMIN B6 10 mg           | 136. VITAMIN C 100 mg           |
| 137. ALCOHOL 95 %               | 138. CALA LOTION                |
| 139. IODINE TINCTURE 2.5 %      | 140. RUBBING ALCOHOL            |
| 141. SCABICIDE EMULSION         | 142. THIMEROSAL TINCTURE        |
| 143. BUCHU TINCTURE             | 144. CAMPHORATED OPIUM TINCTURE |
| 145. COMPOUND BENZOIN TINCTURE  | 146. COMPOUND CARDAMOM TINCTURE |
| 147. COMPOUND GENTIAN TINCTURE  | 148. COMPOUND RHUBARB TINCTURE  |
| 149. IPECACUANHA TINCTURE       | 150. LIQUORICE LIQUID EXTRACT   |
| 151. SENEGA TINCTURE            |                                 |

## Appendix B : List of GPO Products Classified by applying the BCG - Portfolio Matrix

### Group 1 Sale value more than 10 million Baht/year and the gross profit margin more than 30 %

- |                                |                                 |
|--------------------------------|---------------------------------|
| 1. ALBENDAZOLE 200 mg          | 2. DEXTROMETHORPHAN HBr 15 mg   |
| 3. DIAZEPAM 2 mg               | 4. ERYTHROMYCIN STEATATE 250 mg |
| 5. GLIBENCLAMIDE 5 mg          | 6. METHYLDOPA 250 mg            |
| 7. PRAZQUANTEL 600 mg          | 8. PROPRANOLOL 10 mg            |
| 9. PYRAZINAMIDE 500 mg         | 10. CO-TRIMOXAZOLE              |
| 11. MULTIVITAMIN               | 12. VITAMIN B1-6-12             |
| 13. AMOXICILLIN 250 mg, 500 mg | 14. CLOXACILLIN 250 mg, 500 mg  |
| 15. RIFAMPICIN 300 mg, 450 mg  | 16. BROWN MIXTURE 180 ml, 4.5 l |
| 17. MIXT. CARMINATIVE          | 18. RUBBING ALCOHOL             |
| 19. AMOXICILLIN DRY SYRUP      | 20. CHLORPHEN SYRUP             |
| 21. LYSOL                      | 22. AMMONIUM CARBONATE          |
| 23. O.R.S                      |                                 |

### Group 2 Sale value lower than 10 million Baht/year and the gross profit margin more than 30 %

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| 1. AMITRIPTYLINE HCl 10 mg, 25 mg | 2. BENZHEXOL 2 mg, 5 mg            |
| 3. CHLORPROPAMIDE 250 mg          | 4. CYPROHEPTADINE HCl 4 mg         |
| 5. DIAZEPAM 5 mg, 10 mg           | 6. DIGOXIN 0.25 mg                 |
| 7. ETHAMBUTOL 250 mg, 400 mg      | 8. HYDROCHLOROTHIAZIDE 50 mg       |
| 9. KETOTIFEN 1 mg                 | 10. TRISILICATE                    |
| 11. MEBENDAZOLE 100 mg            | 12. METHYLDOPA 250 mg              |
| 13. METOCLOPRAMIDE 10 mg          | 14. METRONIDAZOLE 200 mg           |
| 15. NAPROXEN 250 mg               | 16. CORYSAL                        |
| 17. PHENOBARBITONE 30 mg          | 18. PROPRANOLOL 40 mg              |
| 19. QUININE SULPHATE 300 mg       | 20. SALBUTAMOL 2 mg                |
| 21. SULFADOXINE-PYRIMETHAMINE     | 22. TRIFLAZINE 5 mg                |
| 23. MULTIVITAMIN                  | 24. VITAMIN B COMPLEX FORTE        |
| 25. VITAMIN B1 10 mg              | 26. VITAMIN B1-6-12                |
| 27. MAWANG                        | 28. CEPHALEXIN 250 mg, 500 mg      |
| 29. MEFENAMIC ACID 250 mg         | 30. PIROXICAM 10 mg                |
| 31. ALUMINUM HYDROXIDE GEL        | 32. MIXT. CARMINATIVE              |
| 33. MEBENDAZOLE SUSPENSION        | 34. KAOSALOL                       |
| 35. STOMACHIC MIXTURE             | 36. SODIUM BENZOATE                |
| 37. CHOLINESTERASE TEST PAPER     | 38. AROMATIC AMMONIA SPIRIT        |
| 39. LIQUORICE LIQUID EXTRACT      | 40. COMPOUND BENZOIC ACID OINTMENT |



- |   |                                     |
|---|-------------------------------------|
| 41. BETAMETHASONE CREAM                   | 42. BETAMETHASONE-N CREAM           |
| 43. CLOTRIMAZOLE CREAM                    | 44. GPO ANALGESIC BALM              |
| 45. MICONAZOLE CREAM 2.0 % w/w            | 46. PREDNISOLONE-N CREAM            |
| 47. PLYGESAL CREAM                        | 48. CHLORPHEN SYRUP                 |
| 49. CLOXACILLIN DRY SYRUP                 | 50. PARACETAMOL SYRUP               |
| 51. PARACETAMOL COMPOUND SYRUP            | 52. COMPOUND BENZOIN TINCTURE       |
| 53. BUCHU TINCTURE                        | 54. COMPOUND CARDAMOM TINCTURE      |
| 55. COMPOUND GENTIAN TINCTURE             | 56. IPECACUANHA TINCTURE            |
| 57. CAMPHORATED OPIUM TINCTURE            | 58. COMPOUND RHUBARB TINCTURE       |
| 59. ASEPTINE                              | 60. FORMALDEHYDE SOLUTION           |
| 61. HYDROGEN PEROXIDE SOLUTION 20 VOL     | 62. AMIKACIN 125 mg/2ml, 250 mg/2ml |
| 63. AMPICILLIN 1 g                        | 64. CLOXACILLIN 1 g                 |
| 65. GENTAMICIN SULPHATE 80 mg/2 ml (VIAL) | 66. CALAMINE 450g                   |
| 67. BORAX                                 | 68. SODIUM CHLORIDE                 |
| 69. ZINC OXIDE                            | 70. BRILLIANT BLUE                  |
| 71. ERYTHROSINE                           | 72. PONCEAU 4 R                     |
| 73. SUNSET YELLOW                         | 74. TARTRAZINE                      |

**Group 3 Sale value below 10 million Baht/year and the gross profit margin less than 30 %**

- |                             |                                  |
|-----------------------------|----------------------------------|
| 1. ALUMINA AND MAGNESIA     | 2. ALUMINIUM HYDROXIDE 500 mg    |
| 3. ASPIRIN 60 mg, 300 mg    | 4. BISACODYL 5 mg                |
| 5. CALCIUM GLUCONATE 500 mg | 6. CHLOROQUINE PHOSPHATE 250 mg  |
| 7. CHLORPHENIRAMINE 4 mg    | 8. CHLORPROMAZINE 50 mg, 100 mg  |
| 9. DIMENHYDRINATE 50 mg     | 10. FERROUS SULFATE 300 mg       |
| 11. FOLIC ACID 5 mg         | 12. FUROSEMIDE 40 mg             |
| 13. ISONIAZID 100 mg        | 14. KETOCONAZOLE 200 mg          |
| 15. NICLOSAMIDE 0.5 mg      | 16. PHENOBARBITONE 60 mg         |
| 17. PREDNISOLONE 5 mg       | 18. PRIMAQUINE 15 mg             |
| 19. SODAMINT 300 mg         | 20. SODIUM FLUORIDE 0.55 mg      |
| 21. VITAMIN B1 100 mg       | 22. VITAMIN B2 5 mg              |
| 23. VITAMIN B6 10 mg        | 24. VITAMIN C 100 mg             |
| 25. ELEPHA-C 150 mg         | 26. CHLORAMPHENICOL 250 mg       |
| 27. CHOFIBRIN 350 mg        | 28. URMIN CAPSULES               |
| 29. FA-THALAJ-CHON CAPSULES | 30. ALUMINA AND MAGNESIA ORAL    |
| 31. ALUMINUM HYDROXIDE GEL  | 32. ALMAGEL SUSPENSION           |
| 33. BROWN MIXTURE           | 34. BUCHU CO. MIXTURE            |
| 35. KAOPECTIN               | 36. MIXT. STRAMONIUM CO.         |
| 37. MIXT. SALOL & MENTHOL   | 38. SOD. BICARB. MIXT. PEDIATRIC |

39. MIST. SCILL. AMMON
41. SCABICIDE EMULSION
43. RUBBING ALCOHOL
45. PIPERAZINE ELIXIR
47. SODIUM BENZOATE
49. LINGZHI-TEA
51. LINGZHI-PIECES
53. LINGZHI EXTRACT
55. PRECURSOR TEST UNITS
57. COMPOUND BENZOIC ACID OINTMENT
59. METHYL SALICYLATE CREAM COMPOUND
61. FURAZONE OINTMENT
63. PLUGENAL CERAM 20 mg
65. PARACETAMOL SYRUP
67. SQUILL TINCTURE
69. HYDROGEN PEROXIDE SOLUTION 20 VOL
71. CALCIUM GLUCONATE 10 %
73. CHLORPHENIRAMINE MALEATE 10 mg/ml
75. DEXAMETHASONE SODIUM PHOSPHATE 4 mg/ml
77. DEXTROSE 50 %w/v
79. QUININE DIHCl 600 mg/2 ml
81. STERILE WATER FOR INJECTION
- 83 VITAMIN C 100 mg/ml
95. TALCUM
87. ASAFETIDA TINCTURE
89. WHITFIELD'S OINTMENT
91. CALAMINE LOTION
93. CHLORPHEN. TABLETS
95. COMPOUND FERROUS SULPHATE TABLETS
97. IODINE TINCTURE
99. ISOPROPYL ALCOHOL
101. MILK OF MAGNESIA
103. ANALGESIC BALM
105. BURNS AND SCALDS MIXTURE
107. SENNA TABLETS
109. SODAMINT TABLETS
40. CO-TRIMOXAZOLE SUSPENSION
42. CALA LOTION
44. MILK OF MAGNESIA
46. SENNA TEA
48. INSECTICIDE TOXIC DETECTION KIT
50. LINGZHI-INFUSION
52. LINGZHI-TONICS
54. LINGZHI TONIC (HONEY & GINSENG)
56. AROMATIC AMMONIA SPIRIT
58. METHYL SALICYLATE OINTMENT 25 % w/w
60. METHYL SALICYLATE OINTMENT, COMPOUND
62. PREDNISOLONE CREAM 0.5 % w/w
64. COUGH SYRUP
66. MULTIVITAMIN DRY SYRUP
68. BORIC ACID SOLUTION
70. IPODINE
72. ATROPINE SULFATE 0.60 mg/ml
74. CHLORPROMAZINE 50 mg/2 ml
76. DIAZEPAM 10 mg/2 ml
78. PEN. G SOD. 5,000,000 I.U.
80. SOD. BICARB. 7.5 % w/v
82. TERBUTALINE SULPHATE 1 ml
84. POTASSIUM CITRATE
86. ALUMINA & MAGNESIA TABLETS
88. ASPIRIN TABLETS 300 mg
90. SCABICIDE EMULSION
92. TOOTHACHE DROPS
94. COAL TAR OINTMENT
96. GEMTOAM VOP;ET SP;ITOPM
98. MANDL.S PAINT
100. LIQUID PARAFFIN EMULSION
102. MEBENDAZOLE TABLETS
104. PARACETAMOL TABLETS 500 mg
106. SULPHUR OINTMENT
108. STOMACHIC MIXTURE
110. SULFACETAMIDE EYE DROPS

111. TETRACYCLINE EYE OINTMENT

113. MULTIVITAMIN

115. VITAMIN C

117. PONCEAU 4 R

119. TARTRAZINE & INDIGO CARMINE 1:1

112. THIMEROSAL TINCTURE

114. VITAMIN B COMPLEX

116. LINGZHI-PERSENT SET

118. SUNSET YELLOW FCF

120. TARTRAZINE & INDIGO CARMINE 1:2

**Group 4 Sale value more than 10 million Baht/year and the gross profit margin less than 30 %**

1. CHLORPHENIRAMINE 4 mg

3. ETHAMBUTOL 500 mg

5. PARACETAMOL 500 mg

7. VITAMIN B COMPLEX

9. TETRACYCLINE HCl 250 mg

11. PENICILLIN V DRY SYRUP

13. PARACETAMOL SYRUP PEDIATRIC

2. CIMETIDINE 200 mg, 400 mg

4. NORFLOXACINE 100 mg

6. PENICILLIN V 125 mg, 250 mg

8. LOPERAMIDE 2 mg

10. PARACETAMOL SYRUP

12. BROWN MIXTURE

## Vitae

Mrs.Prapasri Thongtawepol was born in Bangkok. She graduated from faculty of Pharmacy, Mahidol University, Bachelor of Sciences in Pharmacy, in 1976. She was married to Mr.Bunlue Thongtawepol and has two daughters. She has furthered her study in Master of Science in Health Economics, Faculty of Economics, Chulalongkorn University, in 1997.

At present, she is the Director of Packaging Division, the Production Department of the Government Pharmaceutical Organization (GPO).