### Appendix 1: Search strategies for randomized controlled trials on Chinese herbal medicine for symptom management in cancer palliative care

i) The Cochrane Central Register of Controlled Trials (CENTRAL)

|   | Search Strategy                                                      | Count |
|---|---------------------------------------------------------------------|-------|
| 1 | exp Palliative Care/                                                | 1090  |
| 2 | exp Terminal Care/                                                  | 269   |
| 3 | palliative car*.mp.                                                 | 1404  |
| 4 | terminal car*.mp.                                                   | 256   |
| 5 | terminal ill*.mp.                                                   | 48    |
| 6 | palliat*.mp.                                                        | 2571  |
| 7 | (terminal* and (car* or ill*)).mp.                                  | 1856  |
| 8 | ((advanced or end stage or terminal*) adj4 (diseas* or ill* or cancer* or malignan*)).mp. | 11417 |
| 9 | (last year of life or LYOL or life end or end of life).mp.          | 272   |
| 10| 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9                          | 14987 |
| 21| exp Medicine, Chinese Traditional/                                  | 703   |
| 22| exp Drugs, Chinese Herbal/                                          | 2271  |
| 23| exp Phytotherapy/                                                   | 2960  |
| 24| exp Medicine, East Asian Traditional/                               | 766   |
| 25| Chinese herb*.mp.                                                  | 2800  |
| 26| herb*.mp.                                                           | 4913  |
| 27| Traditional Chinese medic*.mp.                                     | 1425  |
| 28| phytother*.mp.                                                      | 3162  |
| 29| (chinese adj5 (traditional or medic*)).mp.                          | 4525  |
| 30| (plant or plants).mp.                                              | 6873  |
| 31| (traditional adj5 medic*).mp.                                      | 3260  |
| 32| Chinese medic*.mp.                                                 | 2609  |
| 33| oriental medic*.mp.                                                | 26    |
| 34| herbaceous agent.mp.                                               | 550   |
|   |   |   |
|---|---|---|
| 35 | medicinal plant*.mp. | 198 |
| 36 | 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 | 14896 |
| 37 | 20 and 36 | 198 |

ii) MEDLINE

|   |   |   |
|---|---|---|
| 1 | Clinical trial.mp. | 578493 |
| 2 | clinical trial.pt. | 489420 |
| 3 | random:.mp. | 841704 |
| 4 | tu.xs. | 3510508 |
| 5 | 1 or 2 or 3 or 4 | 4102494 |
| 6 | exp palliative care/ | 41061 |
| 7 | exp terminal care/ | 42274 |
| 8 | exp terminally ill/ | 5865 |
| 9 | palliat*.mp. | 63977 |
| 10 | palliative car*.mp. | 44119 |
| 11 | terminal car*.mp. | 23513 |
| 12 | terminally ill*.mp. | 9003 |
| 13 | (terminal* and (car* or ill*)).mp. | 37400 |
| 14 | ((advanced or end stage or terminal*) adj4 (diseas* or ill* or cancer* or malignan*)).mp. | 118498 |
| 15 | (last year of life or LYOL or life end or end of life).mp. | 11417 |
| 16 | 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 | 211993 |
| 17 | exp Drugs, Chinese Herbal/ | 29347 |
| 18 | Chinese herb*.mp. | 31217 |
| 19 | exp Medicine, Chinese Traditional/ | 12454 |
| 20 | Traditional Chinese medic*.mp. | 8905 |
| 21 | exp Phytotherapy/ | 30551 |
| 22 | phytother*.mp. | 30659 |
|   | 23 (chinese adj5 (traditional or medic*)).mp. | 25236 |
|---|-----------------------------------------------|-------|
| 24 | (herbs or herbal).mp.                        | 46181 |
| 25 | (plant or plants).mp.                       | 496247|
| 26 | (traditional adj5 medic*).mp.               | 38858 |
| 27 | 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 | 551363|
| 28 | **5 and 16 and 27**                          | 900   |

|   | 1 random:.tw.                                | 880512 |
|---|----------------------------------------------|--------|
| 2 | clinical trial:.mp.                          | 1077245|
| 3 | exp health care quality/                     | 1969915|
| 4 | 1 or 2 or 3                                  | 3246376|
| 5 | exp palliative therapy/                      | 666664 |
| 6 | exp terminal care/                           | 47273  |
| 7 | exp terminal disease/                        | 4812   |
| 8 | exp terminally ill patient/                  | 6249   |
| 9 | exp cancer patient/                          | 126211 |
|10 | palliative therap*.mp.                       | 67642  |
|11 | terminal car*.mp.                            | 26601  |
|12 | terminally ill patient*.mp.                  | 7400   |
|13 | cancer patient*.mp.                          | 221822 |
|14 | palliat*.mp.                                 | 96997  |
|15 | (terminal* and (car* or ill*)).mp.           | 215666 |
|16 | ((advanced or end stage or terminal*) adj4 (diseas* or ill* or cancer* or malignan*)).mp. | 202131|
|17 | (last year of life or LYOL or life end or end of life).mp. | 17553  |
|18 | 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 | 679148 |
|19 | exp Chinese medicine/                        | 24449  |
|20 | exp oriental medicine/                        | 2605   |
|   | Description                                                                 | Count  |
|---|-----------------------------------------------------------------------------|--------|
| 21| exp herbaceous agent/                                                        | 35273  |
| 22| exp medicinal plant/                                                         | 154347 |
| 23| exp Chinese herb/                                                           | 3570   |
| 24| Chinese medic*.mp.                                                          | 40047  |
| 25| oriental medic*.mp.                                                         | 3569   |
| 26| herbaceous agent.mp.                                                        | 35275  |
| 27| medicinal plant*.mp.                                                        | 77812  |
| 28| Chinese herb*.mp.                                                           | 10187  |
| 29| herb*.mp.                                                                  | 121347 |
| 30| 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29              | 269392 |
| 31| **4 and 18 and 30**                                                         | **536**|

iv) CINAHL Plus

|   | Description                                                                 | Count  |
|---|-----------------------------------------------------------------------------|--------|
| S1| (MH “Palliative Care”) OR “Palliative Care” OR (MH “Terminal Care”) OR (MH “Hospice Care”) | 37231  |
| S2| (MH “Terminally Ill Patients”) OR “Terminally Ill” OR (MH “Critical Illness”) OR (MH “Critically Ill Patients”) OR (MH “Terminal Care (Saba CCC)”) OR (MH “Terminal Care”) | 31864  |
| S3| (MH “Hospice and Palliative Nurses Association”)                              | 177    |
| S4| (MH “Terminally Ill Patients”) OR “Terminal$”                              | 23640  |
| S5| (MH “Critical Illness”) OR “last year of life OR LYOL OR life’s end OR end of life” | 6274   |
| S6| S1 OR S2 OR S3 OR S4 OR S5                                                  | 58989  |
| S7| (MH “Alternative Therapies”) OR (MH “Medicine, Chinese Traditional”) OR (MH “Plants, Medicinal”) OR (MH “Medicine, Oriental Traditional”) OR “Alternative Medicine” OR (MH “Medicine, Traditional”) OR (MH “Medicine, Tibetan”) | 45921  |
| S8| (MH “Medicine, Herbal”) OR “Traditional Medicine” OR (MH “Medicine, Traditional”) OR (MH “Medicine, Chinese Traditional”) | 15996  |
| S9| (MH “Medicine, Chinese Traditional”) OR (MH “Medicine, Oriental Traditional”) OR (MH “Drugs, Chinese Herbal”) OR (MH “Plants, Medicinal”) OR “Chinese Medicine” OR (MH “Medicine, Traditional”) OR (MH “Medicine, Herbal”) | 32676  |
| S10 | (MH “Drugs, Chinese Herbal”) OR (MH “Medicine, Chinese Traditional”) OR “Plant Extract” | 21890 |
| S11 | (MH “Drugs, Chinese Herbal”) OR (MH “Medicine, Chinese Traditional”) OR “Chinese Drug” | 6958 |
| S12 | (MH “Medicine, Chinese Traditional”) OR (MH “Drugs, Chinese Herbal”) OR (MH “Plants, medicinal”) OR “Chinese Herb” | 23593 |
| S13 | (MH “Plants, Medicine”) OR “Medicinal Plant” OR (MH “Plant Components”) OR (MH “Medicine, Chinese Traditional”) OR (MH “Medicine, Traditional”) | 23743 |
| S14 | (MH “Plants, Medicine”) OR “Herb” | 18986 |
| S15 | (MH “Alternative Therapies”) OR (MH “Medicine, Chinese Traditional”) OR “Alternative Medicine” OR (MH “Plants, Medicinal”) OR (MH “Medicine, Traditional”) OR (MH “Medicine, Herbal”) | 50073 |
| S16 | (MH “Alternative Therapies”) OR “Complementary Therap$” OR(MH “Medicine, Chinese Traditional”) | 31623 |
| S17 | (MH “Plant Extracts”) OR (MH “Drugs, Chinese Herbal”) OR (MH “Plant Components”) OR “Plant Extracts” | 18231 |
| S18 | S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 | 62680 |
| S19 | (MH “Randomized Controlled Trials”) OR (MH “Clinical Trials”) OR (MH “Cochrane Liabrary”) OR “Clinical Trials” | 169176 |
| S20 | (MH “Evaluation Research”) OR “Evaluation Research” | 20830 |
| S21 | (MH “Comparative Studies”) OR “Comparative Studies” | 78623 |
| S22 | (MH “Crossover Design”) OR “Crossover Design” | 12229 |
| S23 | PT Clinical Trail | 76309 |
| S24 | (MH “Random Assignment”) OR “Random Assignment” | 38027 |
| S25 | S19 OR S20 OR S21 OR S22 OR S23 OR S24 | 297197 |
| S20 | S6 AND S18 AND S25 | 59 |

v) AMED

|   |   |   |
|---|---|---|
|   | Controlled study/ or Randomized Controlled Trial/ | 1663 |
| 2 | Placebo/ | 548 |
|   | Term                                                                 | Count |
|---|----------------------------------------------------------------------|-------|
| 3 | Random$.tw.                                                          | 14267 |
| 4 | crossover.tw.                                                        | 624   |
| 5 | cross-over.tw.                                                       | 254   |
| 6 | placebo$.tw.                                                         | 2664  |
| 7 | ((doub$ or singl$ or tripl$ or trebl$) adj5 (blind$ or mask$)).tw.  | 2382  |
| 8 | (comparativ$ adj5 trial$).tw.                                       | 151   |
| 9 | (clinical adj5 trial$).tw.                                          | 4913  |
| 10| 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9                           | 18218 |
| 11| exp Palliative Care/                                                | 5309  |
| 12| exp Terminal Care/                                                  | 4651  |
| 13| palliate$.mp.                                                        | 91    |
| 14| (terminal$ and (care or caring or ill$)).mp.                        | 5600  |
| 15| ((advanced or end stage or terminal$) adj4 (disease$ or illness$ or cancer$ or malignan$)).mp. | 4863  |
| 16| (last year of life or LYOL or life end or end of life).mp.          | 3303  |
| 17| 11 or 12 or 13 or 14 or 15 or 16                                    | 13046 |
| 18| exp traditional medicine chinese/                                   | 5395  |
| 19| exp drugs chinese herbal/                                           | 1792  |
| 20| exp plants medicinal/                                               | 18955 |
| 21| exp herbal drugs/                                                   | 7336  |
| 22| herb$.mp.                                                           | 11422 |
| 23| (chinese adj5 medicine).mp.                                         | 5704  |
| 24| (traditional chinese adj5 medicine).mp.                             | 1108  |
| 25| (chinese adj5 drug$).mp.                                            | 1976  |
| 26| (chinese adj5 herb$).mp.                                            | 2275  |
vi) Chinese Biomedical Database (CBM) [Chinese]

(“临床试验”[全字段] OR “对照试验”[全字段] OR “随机”[全字段] OR “临床观察”[全字段] OR “临床科研”[全字段] OR “RCT”[全字段] OR “随机对照试验”[全字段]) AND (”中药”[全字段] OR “中草药”[全字段] OR “中成药”[全字段] OR “中西医”[全字段] OR “中医”[全字段]) AND (”肿瘤”[全字段] OR “癌”[全字段] OR “岩”[全字段]) AND (”疲劳”[全字段] OR “疲乏”[全字段] OR “感觉异常”[全字段] OR “知觉异常”[全字段] OR “感觉障碍”[全字段] OR “感觉迟钝”[全字段] OR “痛”[全字段] OR “食欲”[全字段] OR “失眠”[全字段] OR “睡眠障碍”[全字段] OR “水肿”[全字段] OR “浮肿”[全字段] OR “便秘”[全字段] OR “大便不通”[全字段] OR “生活质量”[全字段] OR “生命质量”[全字段] OR “存活”[全字段] OR “生存”[全字段] OR “幸存”[全字段]) 2554

vii) Wan Fang Digital Journals [Chinese]

(“临床试验” OR “对照试验” OR “随机” OR “临床观察” OR “临床科研” OR “RCT” OR “随机对照试验”) AND (”中药” OR “中草药” OR “中成药” OR “中西医” OR “中医”) AND (”肿瘤” OR “癌” OR “岩”) AND (”疲劳” OR “疲乏” OR “感觉异常” OR “知觉异常” OR “感觉障碍” OR “感觉迟钝” OR “痛” OR “食欲” OR “失眠” OR “睡眠障碍” OR “水肿” OR “浮肿” OR “便秘” OR “大便不通” OR “生活质量” OR “生命质量” OR “存活” OR “幸存”) 473

viii) Taiwan Periodical Literature Databases [Chinese]

(TX=临床试验 OR TX=对照试验 OR TX=随机 OR TX=临床观察 OR TX=临床科研 OR TX=RCT OR TX=随机对照试验) [AND] (TX=中药 OR TX=中草药 OR TX=中成药 OR TX=中西医 OR TX=中医) [AND] (TX=肿瘤 OR TX=癌 OR TX=岩) [AND] (TX=疲劳 OR TX=疲乏 OR TX=感觉异常 OR TX=知觉异常 OR TX=感觉障碍 OR TX=感觉迟钝 OR TX=痛 OR TX=食欲 OR TX=失眠 OR TX=睡眠障碍 OR TX=水肿 OR TX=浮肿 OR TX=便秘 OR TX=大便不通 OR TX=生活质量 OR TX=生命质量 OR TX=存活 OR TX=幸存) 31
### Appendix 2 Detailed prescriptions for each CHM formula among included studies

| First author, year of publication | Components of the CHM |
|-----------------------------------|-----------------------|
| Ju, 2006[^1]                     | Jia-wei-xiang-sha-liu-jun-zi decoction (加味香砂六君子汤): mu xiang 木香 (hou xia 后下) 10g, sha ren 砂仁 (hou xia 后下) 10g, bai zhu 白术 10g, chen pi 陈皮 10g, jiang ban xia 姜半夏 10g, dang shen 党参 15g, jue ming zi 决明子 15g, fu ling 茯苓 12g, gan cao 甘草 6g, huang qi 黄芪 30g, rou cong rong 肉苁蓉 15g, huo ma ren 火麻仁 15g, chao gu ya 炒谷芽 15g, chao mai ya 炒麦芽 15g, ye jiao teng 夜交藤 30g, yan hu suo 延胡索 10g. |
| Zhao, 2006[^3]                   | Qing-shu-ke-li(轻舒颗粒): he shou wu 何首乌, rou cong rong 肉苁蓉, huang qi 黄芪, zhi shi 栉实, huo ma ren 火麻仁 |
| Fu, 2006[^4]                     | Qi-ge-kai-wei decoction(启膈开胃汤): sheng huang qi 生黄芪 30g, fu ling 茯苓 30g, mi ren 米仁 30g, sha kou ren 砂蔻仁 5g, chao bai zhu 炒白术 15g, jiang zhu ru 姜竹茹 10g, su geng 苏梗 10g |
| Zhang, 2009[^7]                  | Fu-zheng-he-ji(扶正合剂): huang qi 黄芪, dong chong xia cao 冬虫夏草 |
| Gao, 2010[^2]                    | Yi-qi-run-chang method（益气润肠法）: dang shen 党参 20g, sheng di huang 生地黄 20g, xuan shen 玄参 20g, gou qi 枸杞 20g, sheng bai zhu 生白术 20g, zhi he shou wu 制何首乌 20g, huo ma ren 火麻仁 20g, zhi ke 秧壳 10g, wu yao 乌药 15g, rou gui 肉桂 10g, rou cong rong 肉苁蓉 10g, xing ren 杏仁 6g |
| Sun, 2010[^8]                    | Ren-shen-yang-rong decoction(人参养荣汤): huang qi 黄芪 20g, dang gui 当归 10g, rou gui 肉桂 3g, zhi gan cao 炙甘草 6g, chen pi 陈皮 6g, bai zhu 白术 10g, dang shen 党参 20g, bai shaoyao 茅术 10g, sheng di 生地 10g, wu wei zhi 五味子 6g, fu ling 茯苓 6g, yuan zhi远志 6g |
| Gui, 2010[^3]                    | Bu-zhong- yi-qi decoction（补中益气汤）: dang shen 党参, zhi huang qi 炙黄芪, hong jing tian 红景天, dang gui 当归, zhi shou wu 制首乌, sheng bai zhu 生白术, chen pi 陈皮, sheng ma 升麻, chai hu 柴胡, sheng shan yao 生山药, sheng ji nei jin 生鸡内金, zhi shi 栉实, hou pu 厚朴. |
| Lin, 2011[^5]                    | Chinese medicine enema（中药保留灌肠）: mang xiao 芒硝 12g, sheng da huang 生大黄 (hou xia 后下) 20g, zhi shi 栉实 15g, hou pu 厚朴 15g, pu gong ying 蒲公英 15g, chi shao 赤芍 10g, gan cao 甘草 6g. |
| Li, 2011[^4]                     | Jia-wei-ji-chuan enema（加味济川灌肠）: rou cong rong 肉苁蓉 30g, fu zi 附子 20g, dang gui 当归 20g, chuan niu xi 川牛膝 10g, zhi ke 秧壳 10g, ze xie 泽泻 15g, rou gui 肉桂 5g, sheng ma 升麻 5g, da huang 大黄 5g. |
| Wu, 2011[^4]                     | Gui-dan-san-zhi-san（桂丹三枝散）: gui zhi 桂枝 30g, bai jie 白芥子 30g, wu zu yu 吴茱萸 30g, tu si 蒺藜丝子 30g, dan shen 丹参 30g, etc. |
| Wang, 2012[^10]                   | Tong-tai mixture(通泰合剂):sheng huang qi 生黄芪, yi yi ren 薏苡仁, e zhu 荸术, jie teng 取血藤, bai jie 白芥子, mu tou hui 墓头回, xian he cao 仙鹤草, bai hua she 砂蔻仁, bai zhu 白术. |
| Huang, 2012[^29]                  | Jian-pi-xiao-ji decoction(健脾消积汤): taizi shen 太子参 18g, huang qi 黄芪 30g, bai zhu 白术 12g, fu ling 茯苓 15g, qing pi 凉皮 10g, yi yi ren 薏苡仁 30g, yu jin 郁金 12g, mai ya 麦芽 15g, zhi ke 秧壳 12ge, e zhu 荸术 10g, bai hua she 百花蛇舌草 20g, gan cao 甘草 6g. |
Zhao, 2013 Improved zeng-ye decoction (改良增液汤): xuan shen 30g, sheng di 生地 15g, mai dong 麦冬 15g, san ling 三菱 6g, e zhu 莪术 6g, zhi ke 枳壳 10g, bing lang 槟榔 6g, da huang 大黄 5g.

Jiang, 2013 Traditional Chinese medicine mixture (自拟复方中药): Bai hua she she cao 白花蛇舌草 15g, ban zhi lian 半枝莲 20g, huang bo 黄柏 15g, da huang 大黄 15g, huang qi 黄芪 20g, dang shen 党参 20g, chi shao 赤芍 20g, hong hua 红花 15g, ku shen 苦参 15g, di yu 地榆 15g, mu xiang 木香 9g, chuang lian 川连 9g, hong teng 红藤 15g, chen pi 陈皮 15g, bai tou weng 白头翁 30g, san leng 三菱 12g, e zhu 莪术 12g, zhi shi 枳实 12g.