**Supplementary Materials**

Appendix

Search Strategy Medline Version 2017:

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1 exp Technology Assessment, Biomedical/ and (early\* or first-stage or first-phase or horizon or pilot).tw,kf. (538)

2 ((early assessment or early stage assessment or early phase assessment) adj5 (biomedical or medical or health) adj5 (technology or service\* or app? or application\* or device\* or tool\*)).tw,kf. (6)

3 (Constructive Technology Assessment\* and (early or pilot or forecast\*)).tw,kf. (5)

4 ((Early or novel or pilot\*) adj5 (hta or health technolog\* or technology assess\* or technology evaluat\* or Health innovation\*)).tw,kf. (132)

5 or/1-4 (629)

6 probability/ or bayes theorem/ or markov chains/ (85568)

7 Cost-Benefit Analysis/ (69191)

8 exp models, economic/ (12343)

9 exp Models, Theoretical/ (1498481)

10 exp models, statistical/ (333067)

11 exp decision support techniques/ (68214)

12 exp Risk Assessment/ (214137)

13 exp Uncertainty/ (8842)

14 exp Computer Simulation/ (188970)

15 exp Biomedical Research/ec, mt [Economics, Methods] (31077)

16 (analysis adj3 (cost\* or conjoint or Choice or probabalistic)).tw,kf. (25064)

17 analytic\* hierarch\* process\*.tw,kf. (588)

18 (Bayesian adj2 (techniq\* or method\* or analy\*)).tw,kf. (9767)

19 (bench study or bench studies or bench marking).tw,kf. (357)

20 choice-based.tw,kf. (473)

21 clinical trial\*.tw,kf. (292412)

22 Conjoint analys\*.tw,kf. (560)

23 (decision adj3 (support or modeling or analysis)).tw,kf. (20513)

24 (delphi adj3 (method\* or technique\*)).tw,kf. (3399)

25 discrete-choice experiment\*.tw,kf. (949)

26 early cost-effectiveness.mp. (10)

27 Early Model\*.tw,kf. (231)

28 evidence synthesis\*.tw,kf. (2409)

29 expected value of perfect information.tw,kf. (143)

30 expected value of sample information.tw,kf. (44)

31 expert panel\*.tw,kf. (6906)

32 focus group\*.tw,kf. (32514)

33 headroom.tw,kf. (45)

34 health economic modeling.tw,kf. (37)

35 health impact assessment\*.tw,kf. (693)

36 horizon scanning.tw,kf. (122)

37 (interview\* or focus group\* or user\* feedback\*).tw,kf. (300735)

38 literature review.tw,kf. (64400)

39 (Markov adj3 model\*).tw,kf. (10270)

40 multi-criteria decision.tw,kf. (413)

41 Multi-Parameter Evidence Synthesis.tw,kf. (9)

42 payback from research\*.tw,kf. (9)

43 preference methods.tw,kf. (55)

44 preliminary market Research.tw,kf. (0)

45 real options analysis.tw,kf. (12)

46 (road-mapping\* or multi-path\*).tw,kf. (403)

47 return on investment\*.tw,kf. (1308)

48 qualitative weighting.tw,kf. (4)

49 Technology profiling.tw,kf. (4)

50 usability test.tw,kf. (94)

51 or/5-50 (2513368)

52 5 and 51 (629)

53 remove duplicates from 52 (623)

54 limit 53 to (danish or english or norwegian or swedish) (583)

Embase and Cochrane Version 2017:

1 exp biomedical technology assessment/ and (early\* or first-stage or first-phase or horizon or pilot).tw,kw. (652)

2 ((early assessment or early stage assessment or early phase assessment) adj5 (biomedical or medical or health or (technology or service\* or app? or application\* or device\* or tool\*))).tw,kw. (155)

3 (Constructive Technology Assessment\* and (early or pilot or forecast\*)).tw,kw. (6)

4 ((Early or novel or pilot\*) adj5 (hta or health technolog\* or technology assess\* or technology evaluat\* or Health innovation\*)).tw,kw. (206)

5 or/1-4 (967)

6 device economics.fs. (2083)

7 device economics/ (27)

8 exp statistical model/ (160603)

9 exp theoretical model/ (86905)

10 exp economic evaluation/ (267601)

11 decision support system/ (20371)

12 risk assessment/ (423249)

13 uncertainty/ (15179)

14 computer simulation/ (103025)

15 exp medical research/ (395534)

16 (analysis adj3 (cost\* or conjoint or Choice or probabalistic)).tw,kw. (39868)

17 analytic\* hierarch\* process\*.tw,kw. (902)

18 exp Bayes theorem/ or probability/ or methodology/ or statistical analysis/ (2085324)

19 exp markov chain/ or exp hidden Markov model/ or (Markov\* adj2 model\*).tw,kw. (15171)

20 (Bayesian adj2 (techniq\* or method\* or analy\* or theorem\*)).tw,kw. (10995)

21 (bench study or bench studies or bench marking).tw,kw. (567)

22 (choice based or choicebased or discrete choic\* or clinical trial\* or conjoint analys\* or early model\*).tw,kw. (409683)

23 (delphi adj3 (method\* or technique\*)).tw,kw. (4469)

24 (early cost or early economic).tw,kw. (85)

25 expected value of.tw,kw. (2506)

26 (expert panel\* or expert elicit\* or focus group\* or user\* feedback\* or interview).tw,kw. (190958)

27 (headroom or health economic model\* or health impact or horizon scan\*).tw,kw. (8217)

28 (literature review\* or multi-criteria decsision\* or multi parameter evidence\*).tw,kw. (85332)

29 (payback from research or return on investment).tw,kw. (1645)

30 (preliminary market research or real options analysis or road-mapping or multi-path).tw,kw. (197)

31 (preference methods or qualitative weighting or technolog profiling or usability test\*).tw. (1040)

32 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 (3863687)

33 5 and 32 (474)