
Coeliac disease: search strategies

Search strategy review questions 4.1, 4.2, & 4.3

Which presenting features raise suspicion of coeliac disease?

4.1 What are the clinical signs and symptoms which raise suspicion of coeliac disease?

4.2 What populations have an increased risk of developing coeliac disease?

- i. Co-existing diseases
- ii. Other factors (ie. first-degree relatives)

4.3 What are the long-term consequences of undiagnosed or untreated coeliac disease?

Table 1: search strategy 4.1, 4.2, & 4.3

Medline Strategy, searched 24th July 2013 – 28th August 2014

Database: Ovid MEDLINE(R) <1946 to July Week 2 2013>

Search Strategy:

- 1 (coeliac adj4 disease).tw.
- 2 (celiac adj4 disease).tw.
- 3 (coeliac adj4 sprue).tw.
- 4 (celiac adj4 sprue).tw.
- 5 ((nontropical or non tropical) adj4 sprue).tw.
- 6 ((celiac or coeliac) adj4 syndrome).tw.
- 7 (gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
- 8 ((glutenin or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
- 9 Celiac Disease/
- 10 or/1-9
- 11 (occurrence or prevalen* or incidence or epidemiolog*).tw.
- 12 (seroprevalence or seroepidemiol*).tw.
- 13 Prevalence/
- 14 Incidence/
- 15 Epidemiology/
- 16 or/11-15
- 17 10 and 16
- 18 (first adj4 relative*).tw.
- 19 famil*.tw.
- 20 Family/
- 21 Mothers/
- 22 Fathers/
- 23 Parents/
- 24 Nuclear Family/
- 25 Siblings/
- 26 Child/
- 27 Spouses/
- 28 (mother* or father* or brother* or sister* or parent* or child* or son* or daughter* or husband* or wife* or spouse* or aunt* or uncle* or sibling* or offspring or cousin*).tw.
- 29 genetic*.tw.

Medline Strategy, searched 24th July 2013 – 28th August 2014

Database: Ovid MEDLINE(R) <1946 to July Week 2 2013>

Search Strategy:

30 Genetic Predisposition to Disease/
31 Risk Factors/
32 risk*.tw.
33 or/18-28
34 or/29-32
35 10 and 33 and 34
36 17 or 35
37 undiagnosed.tw.
38 silent.tw.
39 untreated.tw.
40 ((delay* or error*) adj4 diagnos*).tw.
41 (Unrecognised or unrecognized).tw.
42 Hidden.tw.
43 Missed.tw.
44 Misdiagnos*.tw.
45 Undetect*.tw.
46 Delayed Diagnosis/
47 exp Diagnostic Error/
48 or/37-47
49 10 and 48
50 (severe adj4 sepsis).tw.
51 septicemia*.tw.
52 (blood adj4 poisoning).tw.
53 Sepsis/
54 Ricketts.tw.
55 Ricketts/
56 ((nonhodgkin* or non-hodgkin*) adj4 lymphoma*).tw.
57 Lymphoma, Non-Hodgkin/
58 or/51-57
59 10 and 58
60 49 or 59
61 exp Diabetes Mellitus, Type 1/
62 (diabet* or (wolfram adj4 syndrome) or (impaired adj4 glucose adj4 intolerance)).tw.
63 exp Thyroiditis/
64 thyroiditides.tw.
65 (thyroiditis or (hashimoto adj4 disease)).tw.
66 Addison Disease/
67 (addison* adj4 disease).tw.
68 ((adrenal or adrenocortical) adj4 insufficiency).tw.
69 hypocortisolism.tw.
70 hypocorticism.tw.
71 hypoadrenalism*.tw.
72 exp Lupus Erythematosus, Systemic/
73 lupus.tw.
74 Hepatitis, Autoimmune/
75 (auto adj4 immune adj4 (liver or hepatitis)).tw.
76 Turner Syndrome/
77 (turner* adj4 syndrome*).tw.
78 (bonnevie-ullrich adj4 syndrome*).tw.

Medline Strategy, searched 24th July 2013 – 28th August 2014

Database: Ovid MEDLINE(R) <1946 to July Week 2 2013>

Search Strategy:

- 79 (gonadal adj4 dysgenesis).tw.
- 80 exp Alopecia/
- 81 (alopecia or (follicular adj4 mucinosis)).tw.
- 82 baldness.tw.
- 83 IgA Deficiency/
- 84 iga deficienc*.tw.
- 85 Down Syndrome/
- 86 (down* adj4 syndrome*).tw.
- 87 (trisomy adj4 (hypocorticism or "21")).tw.
- 88 Williams Syndrome/
- 89 (william* adj4 syndrome*).tw.
- 90 (elfin adj4 face* adj4 syndrome*).tw.
- 91 Sjogren's Syndrome/
- 92 ((Sjogren* or sjoegren* or sicca*) adj4 Syndrome*).tw.
- 93 Comorbidity/
- 94 (co-morbid* or comorbid* or co-exist* or coexist* or co-occur* or cooccur*).tw.
- 95 or/61-94
- 96 10 and 95
- 97 exp Abdominal Pain/
- 98 (abdominal adj4 (distension or pain or bloat* or cramp*)).tw.
- 99 (stomach adj4 (distension or pain or bloat* or cramp*)).tw.
- 100 exp Diarrhea/
- 101 (diarrhoea or diarrhea).tw.
- 102 Constipation/
- 103 constipat*.tw.
- 104 (colonic adj4 inertia).tw.
- 105 (irritable adj4 colon).tw.
- 106 ((mucous or mucus) adj4 (colitis or colotides)).tw.
- 107 Steatorrhea/
- 108 (steatorrhoea or steatorrhea).tw.
- 109 Flatulence/
- 110 flatulence.tw.
- 111 flatus.tw.
- 112 meteorism.tw.
- 113 Irritable bowel syndrome/
- 114 (irritable adj4 bowel adj4 syndrome).tw.
- 115 ibs.tw.
- 116 Vomiting/
- 117 Nausea/
- 118 (nausea or vomit*).tw.
- 119 emesis.tw.
- 120 Fatigue/
- 121 Lethargy/
- 122 (malaise or fatigue or letharg* or exhaust*).tw.
- 123 exp Weight loss/
- 124 (weight adj4 los*).tw.
- 125 (weight adj4 reduc*).tw.
- 126 malnutrition.tw.
- 127 emaciat*.tw.

Medline Strategy, searched 24th July 2013 – 28th August 2014

Database: Ovid MEDLINE(R) <1946 to July Week 2 2013>

Search Strategy:

- 128 Anorexia/
- 129 anorexia.tw.
- 130 Stomatitis, Aphthous/
- 131 (aphthous adj4 (stomatitis or stomatitides)).tw.
- 132 (aphthous adj4 ulcer*).tw.
- 133 aphthae.tw.
- 134 (canker adj4 sore*).tw.
- 135 Oral Ulcer/
- 136 (oral adj4 ulcer*).tw.
- 137 (mouth adj4 ulcer*).tw.
- 138 Anemia, Iron-Deficiency/
- 139 (iron adj4 deficien*).tw.
- 140 (vitamin adj4 (k or d) adj4 deficien*).tw.
- 141 Peripheral Nervous System Diseases/
- 142 peripheral neuropath*.tw.
- 143 (peripheral adj4 nerv* adj4 disease*).tw.
- 144 (pns adj4 disease*).tw.
- 145 (Peripheral adj4 (oedema or edema)).tw.
- 146 exp Ataxia/
- 147 (ataxia* or (machado adj4 joseph) or (narp adj4 syndrome) or (olivopontocerebellar adj4 atrophy) or (spinocerebellar adj4 degeneration) or (hippel adj4 lindau) or (incoordination* or inco-ordination* or dyscoordination* or dysco-ordination* or dyssynergia or dys-synergia) or (coordination adj4 lack*) or (co-ordination adj4 lack*) or (coordination adj4 impair*) or (co-ordination adj4 impair*) or (rubral adj4 tremor*)).tw.
- 148 Infertility/
- 149 Infertility, Male/
- 150 Infertility, Female/
- 151 (infertility or subfertility or sub-fertility or sterility).tw.
- 152 (reduc* adj4 fertility).tw.
- 153 (recurrent adj4 miscar*).tw.
- 154 Growth Disorders/
- 155 Failure to thrive/
- 156 (fail* adj4 thriv*).tw.
- 157 (cerebrospinal adj4 degeneration*).tw.
- 158 (short adj4 stature).tw.
- 159 (growth adj4 disorder*).tw.
- 160 Osteoporosis/
- 161 (osteoporosis or osteoporoses).tw.
- 162 osteopenia.tw.
- 163 Osteomalacia/
- 164 osteomalacia*.tw.
- 165 Puberty, Delayed/
- 166 (delayed adj4 puberty).tw.
- 167 Headache/
- 168 Headache disorders/
- 169 (headache* or migraine).tw.
- 170 exp Epilepsy/
- 171 (epilep* or seizure*).tw.
- 172 Depression/
- 173 (depression* or depressive* or anxiet* or melanchol* or dysphoria or dysthymia or bipolar or

Medline Strategy, searched 24th July 2013 – 28th August 2014

Database: Ovid MEDLINE(R) <1946 to July Week 2 2013>

Search Strategy:

bi-polar).tw.

174 Anxiety/

175 Anxiety Disorders/

176 (enamel adj4 defect*).tw.

177 (tooth adj4 discoloration).tw.

178 (tooth adj4 discolouration).tw.

179 (arthriti* or (still* adj4 disease) or (felty adj4 syndrome) or (rheumatoid adj4 nodule)).tw.

180 exp Rheumatoid Arthritis/

181 "Signs and Symptoms"/

182 ((sign or signs) adj6 symptom*).tw.

183 Risk Factors/

184 factor*.tw.

185 predict*.tw.

186 or/97-185

187 10 and 186

188 Liver/en [Enzymology]

189 Liver Diseases/en [Enzymology]

190 ((abnormal* or dysfunction*) adj4 liver*).tw.

191 ((elevat* or high* or raise*) adj4 liver*).tw.

192 Amenorrhea/

193 Oligomenorrhea/

194 (amenorrhea* or amenorrhoea* or oligomenorrhea* or oligomenorrhoea*).tw.

195 Menstruation Disturbances/

196 ((absen* or cease* or stop*) adj4 (period* or menstruat* or menses)).tw.

197 hyposplen*.tw.

198 splenic diseases/

199 spleen/

200 spleen*.tw.

201 (gluten adj4 (sensitiv* or neuropath*)).tw.

202 exp Calcinosis/ and exp brain/

203 ((calcinos* or calcificat* or calcium*) adj4 (brain* or intracerebr* or intracran* or cerebr*)).tw.

204 Intussusception/

205 (intestin* adj4 (obstruct* or invaginat*)).tw.

206 (intussuscept* or intususcept*).tw.

207 Intestine Lymphoma/

208 Lymphoma/

209 lymphom*.tw.

210 207 or 208

211 exp Intestines/

212 (intestin* or bowel or gut).tw.

213 (gastrointestin* adj4 tract).tw.

214 or/210-212

215 209 and 213

216 Esophageal Neoplasms/

217 ((oesophag* or esophag*) adj4 (neoplasm* or cancer* or carcinoma* or adenocarcinom* or tumour* or tumor* or malignan* or metastas* or lesion*)).tw.

218 exp Colonic Neoplasms/

219 ((colon* or sigmoid*) adj4 (neoplasm* or cancer* or carcinoma* or adenocarcinom* or tumour* or tumor* or malignan* or metastas* or lesion*)).tw.

220 (Gardner* adj4 syndrome*).tw.

Medline Strategy, searched 24th July 2013 – 28th August 2014

Database: Ovid MEDLINE(R) <1946 to July Week 2 2013>

Search Strategy:

- 221 (polypos* adj4 (col* or intestin*)).tw.
- 222 exp anemia/
- 223 (anaemia* or anemia*).tw.
- 224 (ulcer* adj4 jejun*).tw.
- 225 exp Jejunal Diseases/
- 226 ((inflam* or lesion*) adj4 jejun*).tw.
- 227 refractor*.tw.
- 228 (unrespon* or non-respon* or nonrespon* or non respon*).tw.
- 229 (fail* adj4 respon*).tw.
- 230 ((ongoing or recur*) adj4 symptom*).tw.
- 231 exp Fractures, bone/
- 232 fractur*.tw.
- 233 (bone* adj4 (mineral* or densit* or soft* or decay*)).tw.
- 234 Vitamin D Deficiency/
- 235 avitaminosis D.tw.
- 236 ((calciferol or cholecalciferol or coilecalciferol or egocalciferol) adj4 deficien*).tw.
- 237 Vitamin B 12 Deficiency/
- 238 Folic Acid Deficiency/
- 239 ((folic* or folat* or cyanocobalamin or vitamin*) adj4 defici*).tw.
- 240 Myocarditis/im [Immunology]
- 241 Myocardium/im [Immunology]
- 242 (autoimmune adj4 myocarditis).tw.
- 243 exp Bipolar Disorder/
- 244 (bipolar or mania*).tw.
- 245 ((manic or depressive) adj4 (state* or episod* or psychos?s or disorder* or syndrom* or depression* or illness* or reaction*)).tw.
- 246 Cardiomyopathies/
- 247 Cardiomyopathy, dilated/
- 247 cardiomyopath*.tw.
- 249 myocardiopath*.tw.
- 250 (myocardial* adj4 disease*).tw.
- 251 (heart adj4 myopath*).tw.
- 252 (heart adj4 muscle adj4 disease*).tw.
- 253 (cardiac adj4 muscle adj4 disease*).tw.
- 254 (myocardial adj4 muscle adj4 disease*).tw.
- 255 (deteriorat* adj4 ((myocardium or heart or cardiac) adj4 muscle)).tw.
- 256 exp Purpura, Thrombocytopenic/
- 257 (thrombocytopen* adj4 purpura*).tw.
- 258 Dermatitis Herpetiformis/
- 259 (dermatitis adj4 herpetiformis).tw.
- 260 ((duhring* or duehring* or duhrig* or duehrig*) adj4 (dermatit* or disease* or brocq* or brock* or morbus*)).tw.
- 261 (zosteriform adj4 erupt*).tw.
- 262 (hidroa or hydroa).tw.
- 263 exp HIV/
- 264 exp HIV Infections/
- 265 (HIV or AIDS).tw.
- 266 (acquired adj4 immunodeficien* adj4 syndrome*).tw.
- 267 (human adj4 immunodeficien* adj4 virus*).tw.

Medline Strategy, searched 24th July 2013 – 28th August 2014

Database: Ovid MEDLINE(R) <1946 to July Week 2 2013>

Search Strategy:

268 (lymphadenopath* adj4 assoc* adj4 virus*).tw.
269 (lav-htlv-iii or lav htlv iii).tw.
270 (htlv-III or htlv iii).tw.
271 (human* adj4 t?cell* adj4 leuk?emia*).tw.
272 (human* adj4 t?cell* adj4 lymphotrop*).tw.
273 exp Colitis, Microscopic/
274 ((microscop* or collagen* or lymphoc*) adj4 colitis*).tw.
275 Liver Cirrhosis, Biliary/
276 ((biliar* or liver*) adj4 cirrhos*).tw.
277 exp Sarcoidosis/
278 sarcoidos*.tw.
279 ((besnier* or boeck* or schaumann* or heerfordt* or Jungling*) adj4 (syndrome* or disease* or sarcoid*)).tw.
280 (lupus adj4 pernio).tw.
281 (lymphogranuloma adj4 benignum).tw.
282 neurosarcoidosis.tw.
283 (sarcoid* adj4 granulome).tw.
284 (uveo adj4 parotid adj4 fever*).tw.
285 (uveoparotid adj4 fever*).tw.
286 or/188-207
287 or/215-285
288 286 or 287
289 10 and 288
290 36 or 60 or 98 or 187 or 289
291 animals/ not humans/
292 290 not 291
293 limit 292 to english language

<Insert Note here>

Search strategy review question 4.4

Should active case-finding be implemented in people with co-existing conditions/subgroups that are associated with an increased risk of coeliac disease?

Table 2: search strategy 4.4

Medline Strategy, searched 28th July 2014

Database: Ovid MEDLINE(R) <1946 to July Week 3 2014>

Search Strategy:

1 (coeliac adj4 disease).tw.
2 (celiac adj4 disease).tw.
3 (coeliac adj4 sprue).tw.
4 (celiac adj4 sprue).tw.
5 ((nontropical or non tropical) adj4 sprue).tw.
6 ((celiac or coeliac) adj4 syndrome).tw.
7 (gluten adj4 (enteropath\$ or sensitiv\$ or hypersensitiv\$ or intoleran\$)).tw.
8 ((glutenin or gliadin) adj4 (sensitiv\$ or hypersensitiv\$ or intoleran\$)).tw.
9 Celiac Disease/
10 or/1-9

Medline Strategy, searched 28th July 2014

Database: Ovid MEDLINE(R) <1946 to July Week 3 2014>

Search Strategy:

- 11 Mass Screening/
- 12 exp Population Surveillance/
- 13 Case Management/
- 14 Diagnostic Tests, Routine/
- 15 (case* adj4 (find* or manage*)).tw.
- 16 (active* adj4 screen*).tw.
- 17 ((routin* or target* or population*) adj4 (screen* or detect* or surveill*)).tw.
- 18 ((find* or case*) adj4 (undiagnos* or undetect*)).tw.
- 19 ((active* or screen* or early or proactiv*) adj4 (detect* or investigat*)).tw.
- 20 early diagnosis/
- 21 (early adj4 diagnos*).tw.
- 22 or/11-21
- 23 10 and 22
- 24 animals/ not humans/
- 25 23 not 24
- 26 limit 25 to english language

<Insert Note here>

Search strategy review questions 5.1 & 5.2

Review 5.1

- a) What is the sensitivity and specificity of the serological tests for coeliac disease?
- b) Are the sensitivity and specificity results different in any specified subgroups?

Review 5.2

- a) Which serological test is the most appropriate to diagnose coeliac disease?
- b) Depending on test results, should more than one test be used and, if so, what should be the sequence of testing?
- c) Following which sequence of tests and test results is it appropriate to refer onwards for endoscopic intestinal biopsy for confirmatory diagnosis?

Table 3: search strategy 5.1 & 5.2

Medline Strategy, searched 11th October 2013

Database: Ovid MEDLINE(R) <1946 to September Week 4 2013>

Search Strategy:

- 1 (coeliac adj4 disease).tw.
- 2 (celiac adj4 disease).tw.
- 3 (coeliac adj4 sprue).tw.
- 4 (celiac adj4 sprue).tw.
- 5 ((nontropical or non tropical) adj4 sprue).tw.
- 6 ((celiac or coeliac) adj4 syndrome).tw.
- 7 (gluten adj4 (enteropath* or sensitive* or hypersensitive* or intoleran*)).tw.
- 8 ((glutenin or gliadin) adj4 (sensitive* or hypersensitive* or intoleran*)).tw.

Medline Strategy, searched 11th October 2013

Database: Ovid MEDLINE(R) <1946 to September Week 4 2013>

Search Strategy:

9 Celiac Disease/
10 or/1-9
11 (endomysi* adj4 antibod*).tw.
12 (immunoglobulin adj4 endomysi*).tw.
13 ((anti-endomysi* or antiendomysi* or anti endomysi*) adj4 antibody*).tw.
14 ((iga or igg) adj4 endomysi*).tw.
15 ((iga or igg) adj4 (anti-endomysi* or antiendomysi* or anti endomysi*)).tw.
16 (immunoglobulin adj4 (anti-endomysi* or antiendomysi* or anti endomysi*)).tw.
17 (iga-ema or igg-ema).tw.
18 ema.tw.
19 or/11-18
20 10 and 19
21 (transglutaminase adj4 antibod*).tw.
22 (tissue adj4 transglutaminase adj4 antibod*).tw.
23 (((anti-tissue or antitissue or anti tissue) adj4 transglutaminase) and antibody*).tw.
24 (immunoglobulin adj4 transglutaminase).tw.
25 ((iga or igg) adj4 transglutaminase).tw.
26 (anti-httg or anti-htg).tw.
27 ((anti-human or antihuman or anti human) adj4 transglutaminase adj4 antibod*).tw.
28 transglutaminases/
29 tTG.tw.
30 or/21-29
31 10 and 30
32 (gliadin adj4 antibod*).tw.
33 (immunoglobulin adj4 gliadin).tw.
34 ((antigliadin or anti-gliadin or anti gliadin) adj4 antibod*).tw.
35 ((igg or iga) adj4 gliadin).tw.
36 ((igg or iga) adj4 (antigliadin or anti-gliadin or anti gliadin)).tw.
37 (immunoglobulin adj4 (antigliadin or anti-gliadin or anti gliadin)).tw.
38 (elisa adj4 test*).tw.
39 Gliadin/ and Immunoglobulins/
40 AGA.tw.
41 or/32-40
42 10 and 41
43 (human adj4 (leukocyte* or leucocyte*) adj4 antigen*).tw.
44 (hla adj4 typ*).tw.
45 (dr3 adj4 dq2).tw.
46 (dr4 adj4 dq8).tw.
47 (hla adj4 dq2).tw.
48 (hla adj4 dq8).tw.
49 HLA-DQ Antigens/
50 HLA-DR3 Antigen/
51 or/43-50
52 10 and 51
53 Serologic Tests/
54 (serologic adj4 test*).tw.
55 53 or 54
56 10 and 55
57 20 or 31 or 42 or 52 or 56

Medline Strategy, searched 11th October 2013
Database: Ovid MEDLINE(R) <1946 to September Week 4 2013>
Search Strategy:

58 animals/ not humans/
59 57 not 58
60 limit 59 to english language

<Insert Note here>

Search strategy review question 5.3

What are the referral indications for endoscopic intestinal biopsy for further investigation in people with coeliac disease?

Table 4: search strategy 5.3

Medline Strategy, searched 17th April 2014
Database: Ovid MEDLINE(R) <1946 to April Week 2 2014>
Search Strategy:

1 (coeliac adj4 disease).tw.
2 (celiac adj4 disease).tw.
3 (coeliac adj4 sprue).tw.
4 (celiac adj4 sprue).tw.
5 ((nontropical or non tropical) adj4 sprue).tw.
6 ((celiac or coeliac) adj4 syndrome).tw.
7 (gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
8 ((glutenin or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
9 Celiac Disease/
10 or/1-9
11 Biopsy/
12 Biopsy Needle/
13 exp Image-Guided Biopsy/
14 biops*.tw.
15 or/11-14
16 exp Intestines/
17 intestin*.tw.
18 Duodenum/
19 (duodenum or duodenal).tw.
20 or/16-19
21 10 and 15 and 20
22 Endoscopy/
23 (endoscop* or scope*).tw.
24 Endoscopy, Gastrointestinal/
25 Capsule Endoscopy/
26 Duodenoscopy/
27 duodenoscop*.tw.
28 Gastroscopy/
29 gastroscop*.tw.

Medline Strategy, searched 17th April 2014
Database: Ovid MEDLINE(R) <1946 to April Week 2 2014>
Search Strategy:

30 Esophagoscopy/
31 (esophagoscop* or oesophagoscop*).tw.
32 Endoscopy, Digestive System/
33 (esophagogastroduodenscop* or oesophagogastroduodenscop*).tw.
34 or/22-33
35 "Referral and Consultation"/
36 (refer or referr* or consult* or second opinion* or gatekeep*).tw.
37 35 or 36
38 21 and 34
39 21 and 37
40 38 or 39
41 animals/ not humans/
42 40 not 41
43 limit 42 to english language

<Insert Note here>

Search strategy review question 5.4

- a) How frequently should people with coeliac disease be routinely monitored?
- b) Should the frequency of routine monitoring differ for patients with at risk of developing certain complications?
- c) What should routine monitoring consist of?

Table 5: Search strategy 5.4

Medline Strategy, searched 6th March 2014
Database: Ovid MEDLINE(R) <1946 to February Week 4 2014>
Search Strategy:

1 (coeliac adj4 disease).tw.
2 (celiac adj4 disease).tw.
3 (coeliac adj4 sprue).tw.
4 (celiac adj4 sprue).tw.
5 ((nontropical or non tropical) adj4 sprue).tw.
6 ((celiac or coeliac) adj4 syndrome).tw.
7 (gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
8 ((glutenin or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
9 Celiac Disease/
10 or/1-9
11 Long-Term Care/
12 "Continuity of Patient Care"/
13 exp Patient Care Planning/
14 Disease Management/
15 Patient Compliance/
16 (patient adj4 (compliance or non-compliance or noncompliance or adherence or non-adherence or nonadherence or cooperation or co-operation)).tw. (12335)

Medline Strategy, searched 6th March 2014

Database: Ovid MEDLINE(R) <1946 to February Week 4 2014>

Search Strategy:

17 lost to follow-up/
18 ((long-term or long term or longterm or life-long or life long or lifelong or active or adequa* or continu* or frequen* or repeat* or routine* or regular* or histolog* or serolog* or recommend* or length* or timing or time or number or continuity or continuum or optim* or plan or planned or planning) adj4 (followup* or follow-up* or follow up* or assess* or practice* or strateg* or review* or care or manag*)).tw.
19 monitor*.tw.
20 time factors/
21 or/11-20
22 10 and 21
23 Bone Density/
24 Osteoporosis/
25 exp "Bone and Bones"/
26 (bone* or osteoporo*).tw.
27 or/23-26
28 Serology/
29 exp Serologic Tests/
30 (serolog* or serodiagnos*).tw.
31 or/28-30
32 Histology/
33 histolog*.tw.
34 32 or 33
35 exp Histological Techniques/
36 Diet/
37 Diet, Gluten-Free/
38 exp Nutrition Therapy/
39 (diet* or nutrit*).tw.
40 or/35-39
41 (symptom* adj4 response*).tw.
42 27 or 31 or 34 or 40 or 41
43 (followup* or follow-up* or follow up* or assess* or practice* or strateg* or review* or care or manag*).tw.
44 42 and 43
45 10 and 44
46 22 or 45
47 animals/ not humans/
48 46 not 47
49 limit 48 to english language

<Insert Note here>

Search strategy review question 6.1

- a.) What are the potential causes of non-responsive coeliac disease?
- b.) In patients with confirmed refractory coeliac disease what investigative procedures should be undertaken, such as:

- Clonality assessment
- Flow cytometry
- Aberrant T cell assessment
- Immunophenotyping
- Imaging

Table 6: search strategy 6.1

Medline Strategy, searched 22nd April 2014	
Database: Ovid MEDLINE(R) <1946 to April Week 2 2014>	
Search Strategy:	
1	(coeliac adj4 disease).tw.
2	(celiac adj4 disease).tw.
3	(coeliac adj4 sprue).tw.
4	(celiac adj4 sprue).tw.
5	((nontropical or non tropical) adj4 sprue).tw.
6	((celiac or coeliac) adj4 syndrome).tw.
7	(gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
8	((glutenin or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
9	Celiac Disease/
10	or/1-9
11	refractor*.tw.
12	(unrespon* or non-respon* or nonrespon* or non respon*).tw.
13	(fail* adj4 respon*).tw.
14	((ongoing or recur*) adj4 symptom*).tw.
15	((villous* or villus* or villi* or microvilli* or microvillus* or microvillous*) adj4 atroph*).tw.
16	or/11-15
17	Microvilli/
18	Atrophy/
19	17 and 18
20	16 or 19
21	10 and 20
22	animals/ not humans/
23	21 not 22
24	limit 23 to english language

<Insert Note here>

Search strategy review question 6.2

What is the effectiveness of pharmacological treatments for people with refractory coeliac disease?

Table 7: search strategy 6.2

Medline Strategy, searched 14th June 2014	
Database: Ovid MEDLINE(R) <1946 to June Week 1 2013>	
Search Strategy:	
1	Celiac Disease/
2	((coeliac* or celiac*) adj4 disease).tw.
3	((coeliac* or celiac*) adj4 sprue).tw.
4	((nontropical or non tropical) adj4 sprue).tw.
5	((coeliac* or celiac*) adj4 syndrome).tw.
6	(gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
7	((gluten or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
8	or/1-7
9	Beclomethasone/ or (beclomethason* or beclametason* or beclometason*).tw.
10	Betamethasone/ or betamethason*.tw.
11	Budesonide/ or budesonid*.tw.
12	Ciclesonide/ or ciclesonid*.tw.
13	Adrenocorticotrophic Hormone/
14	(adrenocorticotrop* adj4 hormone*).tw.
15	Corticotropin*.tw.
16	Cortisone/ or cortison*.tw.
17	Deflazacort*.tw.
18	Dexamethasone/ or dexamethason*.tw.
19	Fludrocortisone/ or fludrocortison*.tw.
20	flunisolid*.tw.
21	Hydrocortisone/ or hydrocortison*.tw.
22	Methylprednisolone/ or Methylprednisolon*.tw.
23	Mometasone Furoat*.tw.
24	Prednisolone/
25	prednisolon*.tw.
26	Prednisone/ or prednison*.tw.
27	Cosyntropin/ or (Tetracosactid* or cosyntropin*).tw.
28	Triamcinolone/ or Triamcinolon*.tw.
29	Cyclosporine/ or (cyclosporin* or ciclosporin*).tw.
30	Azathioprine/ or (azathioprin* or azatioprin*).tw.
31	infliximab*.tw.
32	adalumimab*.tw.
33	etanercept*.tw.
34	golimumab*.tw.
35	certolizumab*.tw.
36	Cladribine/ or cladribin*.tw.
37	(ASA adj4 preparation*).tw.
38	Mesalamine/ or (mesalamin* or mesalazin*).tw.
39	alemtuzumab*.tw.
40	thioguanine/ or (thioguanin* or tioguanin*).tw.
41	Immunosuppressive Agents/
42	(immunosuppress* adj4 (antiproliferative* or agent* or substance* or drug*)).tw.
43	(immun* adj4 suppress*).tw.
44	Anti-Inflammatory Agents, Non-Steroidal/
45	(steroid* or non-steroid* or nonsteroid* or NSAID*).tw.
46	Antibodies, Monoclonal/
47	((antibod* adj4 monoclonal*) or anti-tnf*).tw.
48	Antimetabolites/

Medline Strategy, searched 14th June 2014
Database: Ovid MEDLINE(R) <1946 to June Week 1 2013>
Search Strategy:

49 Antimetabolites, Antineoplastic/
50 antimetaboli*.tw.
51 Antineoplastic Agents/
52 ((antineoplast* or anti-cancer* or anticancer*) adj4 (drug* or agent*)).tw.
53 ((tumour* or tumor*) adj4 inhibit*).tw.
54 adrenal cortex hormones/
55 glucocorticoids/
56 glucocort*.tw.
57 (adrenal adj4 cortex* adj4 hormon*).tw.
58 (corticosteroid* or corticoid*).tw.
59 or/9-58
60 8 and 59
61 animals/ not humans/
62 60 not 61
63 limit 62 to english language

<Insert Note here>

Search strategy review question 6.3

What is the effectiveness of nutritional management or nutritional support for people with refractory coeliac disease?

Table 8: search strategy 6.3

Medline Strategy, searched /13th November 2013
Database: Ovid MEDLINE(R) <1946 to October Week 5 2013>
Search Strategy:

1 (coeliac adj4 disease).tw.
2 (celiac adj4 disease).tw.
3 (coeliac adj4 sprue).tw.
4 (celiac adj4 sprue).tw.
5 ((nontropical or non tropical) adj4 sprue).tw.
6 ((celiac or coeliac) adj4 syndrome).tw.
7 (gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
8 ((glutenin or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
9 Celiac Disease/
10 or/1-9
11 Diet/
12 ((diet* or food* or nutrition*) adj4 (exclus* or exclud* or restrict* or support* or eliminat*)).tw.
13 Functional Food/
14 Food, Fortified/
15 (food* adj4 (fortif* or enrich* or additiv* or supplement*)).tw.
16 Feeding Method/
17 feed*.tw.

Medline Strategy, searched /13th November 2013

Database: Ovid MEDLINE(R) <1946 to October Week 5 2013>

Search Strategy:

- 18 Enteral Nutrition/
- 19 ((enteral* or enteric* or intragastric or intestinal or intrainestinal or oral* or sip or tube or force or gastric) adj4 nutrition*).tw.
- 20 ((nasogastric* or gastronomy or jejuostomy) adj4 tube*).tw.
- 21 exp Parenteral Nutrition/
- 22 ((parenter* or intraven* or hyperalimentation or alimentation or fluid) adj4 nutrition*).tw.
- 23 exp Food Hypersensitivity/
- 24 ((egg* or milk or nut or nuts or peanut* or groundnut* or wheat* or soya or fish or shellfish or crustacean* or mollusc* or sesame or soybean or celery or mustard or lupin or sulphur dioxide or food* or nutrition* or diet*) adj4 (hypersensitiv* or allerg*)).tw.
- 25 Energy Intake/
- 26 ((nutrition* or food* or diet* or energy or calorie* or caloric) adj4 (intak* or ingest* or uptak* or consum* or method*)).tw.
- 27 (appetite adj4 regulat*).tw.
- 28 or/11-27
- 29 10 and 28
- 30 animals/ not humans/
- 31 29 not 30
- 32 limit 31 to english language

<Insert Note here>

Search strategy review question 6.4

What is the effectiveness of autologous stem cell transplant for people with refractory coeliac disease?

Table 9: search strategy 6.4

Medline Strategy, searched 4th June 2013

Database: Ovid MEDLINE(R) <1946 to May Week 4 2013>

Search Strategy:

- 1 Celiac Disease/
- 2 (coeliac* or celiac*).tw.
- 3 ((nontropical or non tropical) adj4 sprue).tw.
- 4 (gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
- 5 ((gluterin or gliadin) adj4 (sensitiv* or hypersensitivi* or intoleran*)).tw.
- 6 Enteropathy-Associated T-Cell Lymphoma/
- 7 (enteropath* adj4 associat* adj4 T adj4 cell* adj4 lymphom*).tw.
- 8 EATL.tw.
- 9 or/1-8
- 10 Hematopoietic Stem Cell Transplantation/
- 11 ((hematopoi* or hemoatopoet* or haematopoi* or haemoatopoet* or autolog* or allogene*) adj4 (stem or cell* or transplant* or transfer* or treat*)).tw.
- 12 Auto-SCT.tw.
- 13 ((stem adj4 cell*) and (support* or transfer* or transplant* or treat*)).tw.

Medline Strategy, searched 4th June 2013
Database: Ovid MEDLINE(R) <1946 to May Week 4 2013>
Search Strategy:

14 autotransplant*.tw.
15 autograft*.tw.
16 ASCT.tw.
17 HSCT.tw.
18 or/10-17
19 hematopoietic stem cells/
20 ((hematopiet* or hematopoet* or haematopiet* or haemoatopoet*) adj4 cell*).tw.
21 19 or 20
22 Transplantation/
23 Stem Cell Transplantation/
24 Transplants/
25 Cell Transplantation/
26 (transfer* or transplant* or graft*).tw.
27 or/22-26
28 21 and 27
29 18 or 28
30 exp drug therapy/
31 chemo*.tw.
32 30 or 31
33 29 or 32
34 9 and 33
35 animals/ not Humans/
36 34 not 35
37 limit 36 to english language

<Insert Note here>

Search strategy review questions 7.1 & 7.2

Review 7.1

- a) What information do people (and their family members or carers, as appropriate) need to help them decide whether to undergo initial testing for coeliac disease?
- b) If people are to undergo initial testing, what dietary information do they (or their family members or carers) need before testing to ensure that test results are as accurate as possible?

Review 7.2

- a) What information, education and support do people with coeliac disease (and their family members or carers, as appropriate) need to improve adherence to a gluten-free diet and self-management of their condition?
- b) What is the patient perspective of self-management and how to improve adherence, including what information is required, different monitoring strategies, and with whom they are followed up?

Table 10: search strategy 7.1 & 7.2

Medline Strategy, searched 8th May 2014

Database: Ovid MEDLINE(R) <1946 to April Week 5 2014>

Search Strategy:

- 1 (coeliac adj4 disease).tw.
- 2 (celiac adj4 disease).tw.
- 3 (coeliac adj4 sprue).tw.
- 4 (celiac adj4 sprue).tw.
- 5 ((nontropical or non tropical) adj4 sprue).tw.
- 6 ((celiac or coeliac) adj4 syndrome).tw.
- 7 (gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
- 8 ((glutenin or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
- 9 Celiac Disease/
- 10 or/1-9
- 11 Qualitative Research/
- 12 Nursing Methodology Research/
- 13 exp Interviews as topic/
- 14 Questionnaires/
- 15 Narration/
- 16 Health Care Surveys/
- 17 (qualitative* or interview* or focus group* or questionnaire* or narrative* or narration* or survey*).tw.
- 18 (ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic* adj4 analys*) or theoretical sampl* or purposive sampl*).tw.
- 19 (hermeneutic* or heidegger* or husser* or colaizzi* or van kaam* or van manen* or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*).tw.
- 20 (metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them*).tw.
- 21 or/11-20
- 22 exp Patients/px
- 23 exp Family/px
- 24 Caregivers/px
- 25 ((patient* or parent* or famil* or relative* or carer* or caregiver* or care-giver* or spous* or husband* or wife* or wive* or partner* or mother* or father* or sibling* or sister* or brother* or inpatient* or in-patient*) adj6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*)).ti.
- 26 Stress, Psychological/
- 27 Adaptation, psychological/
- 28 Emotions/
- 29 Anxiety/
- 30 Fear/
- 31 exp Consumer Satisfaction/
- 32 patient* report* outcome*.tw.
- 33 or/22-32
- 34 exp Patients/
- 35 exp Family/
- 36 Caregivers/
- 37 (patient* or parent* or famil* or relative* or carer* or caregiver* or care-giver* or spous* or husband* or wife* or wive* or partner* or mother* or father* or sibling* or sister* or brother* or inpatient* or in-patient*).ti.
- 38 or/34-37
- 39 Pamphlets/
- 40 Needs Assessment/

Medline Strategy, searched 8th May 2014
Database: Ovid MEDLINE(R) <1946 to April Week 5 2014>
Search Strategy:

41 Information Centers/
42 Information Services/
43 Health Education/
44 Information Dissemination/
45 Counseling/
46 Social Support/
47 Self-Help Groups/
48 Self Care/
49 ((patient* or parent* or famil* or relative* or carer* or caregiver* or care-giver* or spous* or husband* or wife* or wive* or partner*) adj6 (educat* or informat* or communicat* or pamphlet* or handout* or hand-out* or hand out* or booklet* or leaflet* or support* or need* or advice* or advis*).ti.
50 ((patient* or parent* or famil* or relative* or carer* or caregiver* or care-giver* or spous* or husband* or wife* or wive* or partner*) adj6 (counsel* or selfhelp* or self-help* or self help* or selfcar* or self-car* or self car*).ti.
51 Patient Education as Topic/
52 Patient Education Handout/
53 Consumer Health Information/
54 patient* diar*.tw.
55 or/39-54
56 38 and 55
57 21 or 33 or 56
58 Animals/ not Humans/
59 57 not 58
60 10 and 59
61 animals/ not humans/
62 60 not 61
63 limit 62 to english language

<Insert Note here>

Search strategy review question 7.3

What dietary management strategy/advice should be given to people with coeliac disease?

Should the advice include avoiding gluten-free oats as part of the exclusion diet?

Table 11: search strategy 7.3

Medline Strategy, searched 15th November 2013
Database: Ovid MEDLINE(R) <1946 to November Week 1 2013>
Search Strategy:

1 (coeliac adj4 disease).tw.
2 (celiac adj4 disease).tw.
3 (coeliac adj4 sprue).tw.
4 (celiac adj4 sprue).tw.

Medline Strategy, searched 15th November 2013

Database: Ovid MEDLINE(R) <1946 to November Week 1 2013>

Search Strategy:

5 ((nontropical or non tropical) adj4 sprue).tw.
6 ((celiac or coeliac) adj4 syndrome).tw.
7 (gluten adj4 (enteropath* or sensitiv* or hypersensitiv* or intoleran*)).tw.
8 ((glutenin or gliadin) adj4 (sensitiv* or hypersensitiv* or intoleran*)).tw.
9 Celiac Disease/
10 or/1-9
11 Diet/
12 Dietary Supplements/
13 ((supplement* or additiv* or fortif*) adj4 (food* or diet* or nutrition*)).tw.
14 (nutr?ceutical* or neutr?ceutical*).tw.
15 ((nutrition* or diet* or food*) adj4 (manag* or advic* or guid* or support* or strateg*)).tw.
16 Vitamins/
17 vitamin*.tw.
18 Vitamin B 12/
19 Vitamin B Complex/
20 Vitamin D/
21 Calcium/
22 calcium.tw.
23 Iron/
24 iron.tw.
25 Folic Acid/
26 (folic adj4 acid).tw.
27 (vit adj4 (m or b9 or b-9 or b 9)).tw.
28 (pteroylglutamic or folvite or folate or folacin).tw.
29 Avena Sativa/
30 (avena adj4 sativa).tw.
31 oat*.tw.
32 (cereal* or porridge* or muesli* or granola*).tw.
33 or/11-32
34 10 and 33 (2608)
35 animals/ not humans/
36 34 not 35
37 limit 36 to english language

<Insert Note here>

Health economics search strategy

Economic evaluations and quality of life data

Sources searched to identify economic evaluations

- NHS Economic Evaluation Database – NHS EED (Wiley)
- Health Economic Evaluations Database – HEED (Wiley)
- Embase (Ovid)
- MEDLINE (Ovid)

- MEDLINE In-Process (Ovid)
- PubMed

Search filters to retrieve economic evaluations and quality of life papers were appended to all of the search strategies **above (except 5.1, 5.2, 5.3, 7.1 and 7.2)** to identify relevant evidence between May 2013 and July 2014. The re-run searches took place in December 2014.

Table 12: Health economics filters

The MEDLINE economic evaluations and quality of life search filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.	
Economic evaluations	
1	Economics/
2	exp "Costs and Cost Analysis"/
3	Economics, Dental/
4	exp Economics, Hospital/
5	exp Economics, Medical/
6	Economics, Nursing/
7	Economics, Pharmaceutical/
8	Budgets/
9	exp Models, Economic/
10	Markov Chains/
11	Monte Carlo Method/
12	Decision Trees/
13	econom\$.tw.
14	cba.tw.
15	cea.tw.
16	cua.tw.
17	markov\$.tw.
18	(monte adj carlo).tw.
19	(decision adj2 (tree\$ or analys\$)).tw.
20	(cost or costs or costing\$ or costly or costed).tw.
21	(price\$ or pricing\$).tw.
22	budget\$.tw.
23	expenditure\$.tw.
24	(value adj2 (money or monetary)).tw.
25	(pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
26	or/1-25
Quality of life	
1	"Value of Life"/
2	Quality-Adjusted Life Years/
3	quality adjusted life.tw.
4	(qaly\$ or qald\$ or qale\$ or qtime\$).tw.
5	disability adjusted life.tw.
6	daly\$.tw.
7	Health Status Indicators/
8	(sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirtysix or short form thirty six).tw.
9	(sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw.
10	(sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw.
11	(sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen

The MEDLINE economic evaluations and quality of life search filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.

Economic evaluations

or short form sixteen).tw.

12 (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw.

13 (euroqol or euro qol or eq5d or eq 5d).tw.

14 (hye or hyes).tw.

15 health\$ year\$ equivalent\$.tw.

16 (health adj3 state adj3 utilit\$).tw.

17 (utilit\$ adj3 (health\$ or valu\$ or weight\$ or scor\$ or measure\$)).tw.

18 (hui or hui1 or hui2 or hui3).tw.

19 disutili\$.tw.

20 rosser.tw.

21 quality of wellbeing.tw.

22 quality of well-being.tw.

23 qwb.tw.

24 willingness to pay.tw.

25 standard gamble\$.tw.

26 time trade off.tw.

27 time tradeoff.tw.

28 tto.tw.

29 (preferen\$ weight\$ or health state preferen\$).tw.

30 or/1-30

<Insert Note here>