Table 5: Evidence table – Jafri et al. (2008)

Study type	Case control
Country	USA
Number of patients	N=83 with CD N=166 matched controls without CD
quality	1. Did the study have a clearly focused aim? Yes 2. Was the cohort recruited in an acceptable way? Yes 3. Was the exposure accurately measured to minimise bias? Yes 4. Was the outcome accurately measured to minimise bias? Yes 5. Have the authors identified all important confounding factors? Have they taken account of confounding factors in the design/analysis? No - not clear if age accounted for and the taking of calcium supplements 6. Was the follow-up of subjects complete enough? Was the follow-up of subjects long enough? Yes 7. What are the results? May be increased Fracture risk in those with undiagnosed CD 8. How precise are the results? Imprecise wide CI 9. Do you believe the results? No, results lie on line of no effect 10. Can the results be applied to the local population? Not clear 11. Do the results fit with other available evidence? Yes, moderately 12. What are the implications of this study for practice? Not clear
Study population	Olmsted County (Minnesota) residents with coeliac disease (confirmed by standard clinical and histologic criteria) Median age: 46 years (range 1 to 84) 70% female (58) Mean period of observation between date of the first registration and the diagnosis date (or date of closest clinical visit for controls) was 9.7 years in both groups with 5.1 year median follow-up for cases and 4.5 years for controls.
Control	2 per patient taken from among Olmsted County (Minnesota) residents and matched by age (+/- 2 years), sex, and closest clinical number
Length of follow-up	Length of time which participants' histories were tracked was not reported. However, complete inpatient and outpatient records at each local provider were checked for occurrence of fracture (author states that medical records for those in Olmsted County are held in central database)

<table>
<tr><td>Details of coeliac testing</td><td>Authors state that coeliac disease was confirmed by standard clinical and histologic criteria (no other details provided)</td></tr>
<tr><td>Results</td><td>Fracture risk before diagnosis:
<table>
<tr><th>Fracture type</th><th>Unadjusted HR (95% CI)</th><th>p value</th><th>Adjusted HR (95% CI) [a]</th><th>p value</th></tr>
<tr><td>Any</td><td>2.0 (1.0, 3.9)</td><td>0.045</td><td>2.0 (1.0, 3.9)</td><td>0.044</td></tr>
<tr><td>Peripheral</td><td>2.0 (1.0, 3.8)</td><td>0.052</td><td>2.0 (1.0, 3.9)</td><td>0.054</td></tr>
<tr><td>Axial</td><td>1.7 (0.7, 4.1)</td><td>0.273</td><td>1.7 (0.7, 4.2)</td><td>0.258</td></tr>
<tr><td>Osteoporotic</td><td>8.0 (0.9, 72)</td><td>0.063</td><td>6.9 (0.7, 65)</td><td>0.093</td></tr>
</table>
(all odds ratios are patients with coeliac vs controls) (unclear if authors have used correct calculation of OR for matched study designs)
[a] adjusted for Charlson comorbidity index (a weight index which takes into account the number and seriousness of 17 chronic comorbid diseases)</td></tr>
<tr><td>Source of funding</td><td>Research grants from the University of Rochester General Clinical Research Centre from the National Institutes of Health, US Public Health Service</td></tr>
<tr><td>Conflicts of interest</td><td>Not reported (however, the authors state the funding source had no role in the design or executive of the study)</td></tr>
<tr><td>Comments</td><td>Diagnosis of ostopenia or osteoporosis was significantly more prevalent in cases than controls (17% vs 7%, p=0.016) but rates of thyroid disease were not significantly different; .</td></tr>
</table>

Definitions of abbreviations are given at the end of this document.