

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Alendronate, etidronate, risedronate, raloxifene, strontium ranelate and teriparatide  
for the SECONDARY prevention of osteoporotic fragility fractures in postmenopausal women

Comments received from non- consultee and commentators that specifically relate to the SECONDARY prevention  
Appraisal Consultation Document (2006 ACD) – Please see the PRIMARY prevention 2006 ACD for general comments.

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
Carer 1	1	Surely, women have a right to know the severity of the disease from which they are suffering. Without a bone scan there is no benchmark by which to measure the efficacy of the treatment or when the treatment can be discontinued. My wife"s treatmrent was discontinued after 4 years because of the improvement in her bone density. She has now been without medication for 4 years, saving the NHS far more than 2 DEXA scans. If these recommendations are confirmed, patients over 75 years of age who now receive regular DEXA scans will not do so in the future. There are many cases like my wife"s; would they just go back on medication to be on the safe side? Are women aged 65-74 to receive no treatment if they are unable to comply or are intolerent of alendronate and have a T-score above-3? A similar question arises for women aged under 65.	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. More detail about measurement of BMD and DXA scanning will be given in the NICE clinical guideline on 'Osteoporosis: assessment of fracture risk and the prevention of osteoporotic fractures in individuals at high risk'
	2	If severe osteoporosis is T-score of -2.5 or below with one or more associated fractures, why do women below the age of 65 have to have a T-score of -3 in order to receive treatment? Surely, anyone with severe osteoporosis should receive treatment to reduce the likelihood of further fractures. Para. 2.7 says "Postmenopausal women with an initial fracure are at substantially greater risk of subsequent fractures." Why then is nothing to be done to ensure these subsequent fractures do not occur? Is this just to save a few pounds without any concern of the pain and disability that may occur?	The 2007 ACD recommendations for secondary prevention have been revised and now recommend non-proprietary alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below.
NHS Professional 1	1.3	Section 1.3 is missing and is referred to in other subsequent sections	Section 1.3 in the 2006 ACD covered the recommendations for risedronate. It is unclear why [NHS professional 1] could not see this section.
NHS Professional 2	1	If etidronate does not have supporting evidence, and taking into consideration the unfavourable dosage regimen it is hard to understand why it has been added to the treatment options. Including it solely because it is the cheapest treatment available does not seem to be a good enough reason especially as the cost of alendronate will decrease. Risedronate has been included as a treatment option for patients who are	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. The Committee has taken into account the reservations of consultees and commentators regarding the clinical

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		unable to comply with the special instructions for the administration of alendronate. The literature states that the administration requirements for alendronate and risedronate are the same therefore why would this be an option?	effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.
NHS Professional 3	1	Calcium & vitamin D supplementation: This guidance is vague. There is general confusion over the best dosing to employ with these products and appropriate guidance should be given. Section 4.3.29 quotes a "forthcoming" guideline to address this. You should also state that in this section. Treatment choices overall: A flow diagram would be a better way to express these choices, giving more clarity. The implication seems to be 1.1, if cheaper then 1.2, if not 1.2 use 1.3, if not 1.3 use 1.4, then use 1.5. This is not clear on initial reading. 1.2 The text implies that etidronate is classed with alendronate as equivalent and should be used instead of alendronate if a "cheaper option". Is this really what is being suggested? The evidence which you quote later does not support this equivalence.	Calcium and vitamin D were not appraised in this technology appraisal, but may be addressed in the NICE clinical guideline on 'Osteoporosis: assessment of fracture risk and the prevention of osteoporotic fractures in individuals at high risk'  The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment, so a flow diagram is not required anymore. The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.
NHS Professional 4	1.1	makes sense, don't change	Comment noted.
	1.2	it is confusing to have different criteria for access to the bisphosphonates. Make the criteria the same with the order of preference alendronate, risedronate, etidronate. The evidence base for etidronate is less robust than that for risedronate.	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.
	1.3	it is confusing to have different criteria for access to the bisphosphonates. Make the criteria the same with the order of preference alendronate, risedronate, etidronate. The evidence base for etidronate is less robust than that for risedronate.	See above
	1.4	makes sense, don't change.	Comment noted.
	1.5	makes sense, don't change.	Comment noted.

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
	1.6	as these drugs don't eliminate fracture risk but only reduce it then a large proportion of people who take them will still fracture. This is an unworkable definition of unsatisfactory response and will potentially open the floodgates to the use of teriparatide. General comment - how long should these drugs be used for?	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. Evidence related to the duration of treatment was not received for this appraisal.
	1.7	as these drugs don't eliminate fracture risk but only reduce it then a large proportion of people who take them will still fracture. This is an unworkable definition of unsatisfactory response and will potentially open the floodgates to the use of teriparatide. General comment - how long should these drugs be used for?	See above
	4.3.29	""The Committee suggested that the forthcoming clinical guideline could specify how such assessment should be made and what supplementation should be prescribed."" This can't wait and advice is needed in this document. Make it simple otherwise it won't happen. Advise calcium 1-1.2g and vit D 800iu per day (preferably in the same preparation) to be co-prescribed with these drugs.	Calcium and vitamin D were outside the remit for this appraisal, and therefore the Committee cannot make any recommendations on Calcium and vitamin D.
	5	You need to provide advice on what to with people who don't meet the criteria but are already on bisphosphonates or raloxifene i.e. stop them to avoid wasting scarce resources.	NICE produces prospective guidance and this issue is clarified in the 2007 ACD section 1.3.: Women who are currently receiving treatment with one of the drugs covered by this appraisal should have the option to continue therapy until they and their clinicians consider it appropriate to stop.
NHS Professional 5	1	The previous version of this NICE appraisal used costings for alendronate/risedronate that parallel the current costs of strontium. In over 75 year olds treatment was not only cost effective - it was cost saving. This situation has not changed, even if lower cost generic alendronate constitutes a new, even more cost-effective, cost saving first choice option	The cost effectiveness modelling has been revised to the price of £7.31 for 4 tablets (November 2006), and the 2007 ACD recommendations for secondary prevention now recommend non-proprietary alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below.
	1.4	. In paragraph 1.4 - strontium therapy - there is still no justification for raising the BMD threshold among over 75 year olds. This will simply exclude a subset of these women from receipt of a cost saving intervention. Strontium is clearly a crucial option in the frail elderly, who are: - that part of the population for whom strontium's benefit is best defined, and - the people at greatest risk of recurrent fracture (50% of which will affect the hip). The -2.5 threshold should be removed from paragraph 1.4 ... in respect of over 85 year olds. Even before she demonstrated her osteoporosis by suffering a first fragility fracture the average 85 year old woman would be expected to have a T-score of -2.5. The requirement to measure BMD would be wasteful use of DXA	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		resources in this age group.	
NHS Professional 6	1	I work in Weston super Mare, an area with a relatively high proportion of patients that will be affected by these proposals. My understanding is that patients diagnosed with OP at a BMD of -2.5 to -2.9 that are intolerant of alendronate and cyclical etidronate would not be eligible for any alternative specific treatment. In my experience this will apply to a substantial proportion of women and create marked anxiety and unnecessary clinical risk. The same principals apply to guidance for primary prevention. What moves do NICE propose to address these anomolies?	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. Recommendations for 2 <sup>nd</sup> line therapy will be given in the NICE clinical guideline on 'Osteoporosis: assessment of fracture risk and the prevention of osteoporotic fractures in individuals at high risk'
NHS Professional 7	1	I largely support these recommendations, in particular the identification of generic alendronate alone as a first line agent on account of its superior cost effectiveness. However, I am concerned that the very frail, such as those in care homes, who are rarely referred for BMD measurement, will therefore fail to receive secondary prevention of any kind if they are unable to receive alendronate for any reason. A more pragmatic approach would be for frail older patients with prior fragility fracture and ongoing risk of falls and fractures to receive second line agents without the need for BMD measurement, much as in the previous NICE recommendations, but incorporating strontium. I am concerned that the recommendations may lead to the continued use of etidronate, for which I believe the evidence base is poor, as it is perceived to be cheap by GP"s, although it is less cost effective (i.e. the decision to spend less now may result in greater fracture costs in future).	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. Recommendations for 2 <sup>nd</sup> line therapy will be given in the NICE clinical guideline on 'Osteoporosis: assessment of fracture risk and the prevention of osteoporotic fractures in individuals at high risk'
	2	Hip fracture estimates seem rather low. The figure for England alone is nearer 80,000 per year. I assume that the figure stated in 2.8 relates only to osteoporotic fractures, which should be made more explicit in the text. The omission of falls risk as a part of fracture risk is illogical. Any model of non-vertebral fracture prevention must include assessment of falls risk.	The Committee acknowledges that the risk of falling is important, but did not receive any evidence about the drugs' effectiveness on the fracture risk associated with the risk of falling.
	3	No comment required.	Comment noted.
	4.1.2	The assumption in 4.1.2 risks making all subsequent analyses suspect. The evidence base for etidronate is not at all strong. It is acknowledged that there is no RCT evidence to support the use of etidronate in prevention of non-vertebral fracture and translating the results of an observational study is questionable. I agree that the evidence base for strontium and raloxifene, particularly with regard to non-vertebral fracture, is weaker and that this justifies the recommendation for BMD measurement in most cases. I believe that the evidence base for teriparatide for BMD change is good, but that there is insufficient trial data to support the clinical use of teriparatide at this stage. If NICE approves	The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.  Comment noted.

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		the use of teriparatide, this will remove the stimulus for further clinical research. I look forward with interest to the clinical guideline on calcium and vitamin D.	
	5	I would suggest that the recommendations on implementation go further and that NICE recommends that secondary prevention of osteoporotic fractures is incorporated in the Quality and Outcomes Framework as the most effective means of delivering such treatment.	Implementation advice is now developed separately at the stage when the guidance is issued.
	6	I agree with the proposed research. I would also suggest that Teriparatide is only used in a clinical research setting until there is a larger evidence base for its use, particularly in non-vertebral fracture prevention.	Comment noted.
NHS Professional 8	1	I cannot understand the logic of the guidance re: etidronate - your document says etidronate is not effective but because it is cheaper than risedronate (which is effective) it is recommended above risedronate. Effectiveness should rank above cost and etidronate should not be recommended at all.	The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.
NHS Professional 9	1	I don't agree with the fact that women with fragility fractures over 75 years can be treated without DEXA scanning. A recent audit of our DEXA results in women >75 who have had fragility fractures (n=976) shows that about 15% of over 75s have normal BMD; 45% have osteopenia and only 40% have osteoporosis. Therefore this recommendation is placing patients at risk of side effects for no benefit. There is no evidence base to show that Etidronate prevents non vertebral fractures. It is also the most difficult drug to take (2hrs fasting before and after) It does not seem right that different treatments have different T-score thresholds for initiation therapy. It will be difficult to tell patients that they merit treatment for osteoporosis, but if they are intolerant then they can't get another treatment because of the different cost. The definition of unsatisfactory response is quite arbitrary. It could be that someone will respond well to treatment (e.g. by increasing BMD), but can still have a fragility fracture. Even the best treatments only reduce fractures by 40% or so.	<p>The 2007 ACD recommendations do not stipulate that no DXA scan should be carried out in women aged 75 years or older. They just give the clinician the option if they consider a DXA scan to be clinically inappropriate or unfeasible.</p> <p>The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.</p> <p>The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment.</p>
NHS Professional 10	<b>Conflict</b>	This response is on behalf of the School of Radiography, Informatics and Osteoporosis in the Faculty of Education, Health and Sciences at the University of Derby	Comment noted.
	1	Diagnostic threshold based on T score @ fem. neck not evidenced -WHO was for epidemiological reasons only - see ISCD position statement (Hans et al. JCD 2006;9(1):15-21) No secondary causes or clinical risk factors in management decisions not justified they are known to increase # risk in numerous studies. T score alone is poor marker for intervention threshold (Kanis JA et al Osteoporosis International. 2001;12(12):989-95). Evidence for efficacy without osteoporosis is poor so why no DXA after 75 (McClung	<p>Comments noted.</p> <p>The 2007 ACD recommendations do not stipulate that no DXA scan should be carried out in women aged 75 years or older. They just give the clinician the option if they consider a DXA scan to be clinically inappropriate or unfeasible</p>

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
	MR et al N Engl J Med. 2001 February 1, 2001;344(5):333-40 Etidronate no evidence for hip #: see our comments in primary prevention ACD RIS/Sr: see primary prevention ACD - unethical to deny Rx to those unlucky to have side effects to ALN and risks patient safety. Eg woman aged 80, coeliac disease + poor mobility + FHx of hip # + T - 3.5 denied treatment because ADR bisphosphonates. Need DXA in RIS users But not ALN users is inconsistent - evidence for both is same Circular argument advising RIS if unable to comply with instructions for ALN but paragraph 3.6 says instructions for ALN & RIS are the same.		The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment.
	4.1.5.4	Alendronate efficacy Why is the RR for hip # 0.62 (0.49 before) TAG 87 referred to those with established OP but new meta-analysis includes studies with patients without prior # - highly misleading in an appraisal for established osteoporosis.	On advice of the NICE clinical guideline development group on 'Osteoporosis: assessment of fracture risk and the prevention of osteoporotic fractures in individuals at high risk' the RRs were pooled across all T-scores and risk factors.
	4.1.8.1	Pooled risedronate and alendronate data why they are not equivalent in this TA? Yet another RR of 0.71.	The analysis was carried out for combined (second generation ) bisphosphonates on the advice of the Guidelines Development Group as it was considered that the second generation bisphosphonates had an overlapping efficacy range and could be considered a clinical class
	4.2.13	Population-based weighting for clinical risk factors is puzzling and counter-intuitive. Model is faulty because risk is individual	The details of the economic modelling are described in detail in the Assessment Report for this appraisal.
	4.2.20	No evidence bisphosphonates act only on BMD related fracture risk most implausible theory? Noted in feedback to primary prevention ACD	Following consultation on the 2006 ACD, the Committee decided that the assumption of no efficacy on fracture risk associated with risk factors other than low BMD, age, or prior fracture (0% efficacy assumption) was probably too extreme. On balance, 50% efficacy for the fracture risk not associated with low BMD, age, or prior fracture was considered a reasonable, although necessarily approximate position. This position was taken as the Committee was still not persuaded that there was unequivocal evidence that the drugs alone would reduce the overall fracture risk for factors other than low BMD, age, or prior fracture. In addition, the Committee accepted an increased estimate for the RRs applied to the risk factors age, BMD, prior fracture to allow for this assumption.
	4.3.11	Fracture and home help costs: has committee properly reflected on true fracture cost (Lawrence TM et al Injury. 2005;36(1):88-91) and residential	The Committee considered a number of sensitivity analyses regarding fracture and home help cost.

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		care costs(Kanis JA et al Health Technology Assessment. 2002;6 ((29)))? Should not the data from the STAR [6] trial be accepted as a relevant data?	
	5	85% of trusts reported full compliance with standard C5 on self assessment. This is unbelievable with respect to TAG 87 given the evidence base from research that repeatedly demonstrates median levels of less than 1 in 5 patients receiving secondary prevention [1, 2], the results of national [3] and local [4] audit. The inescapable conclusion is that implementation is not being effectively monitored. [1] Elliot-Gibson Vet al. Practice patterns in the diagnosis and treatment of osteoporosis after a fragility fracture: a systematic review. Osteoporos Int. 2004;15(10):767-78. [2] Giangregorio L et al. Fractures and the Osteoporosis Care Gap: An International Phenomenon. Sem Arth Rheum 2006;35(5):293-305. [3] The Clinical Effectiveness and Evaluation Unit Royal College of Physicians London. National Audit of the Organisation of Services for Falls and Bone Health for Older People. Available from: <a href="http://www.rcplondon.ac.uk/college/ceeu/fbhop/NationalAuditReportFinal30Jan2006.PDF">http://www.rcplondon.ac.uk/college/ceeu/fbhop/NationalAuditReportFinal30Jan2006.PDF</a> [4] Bayly JR, et al. Standards in the management of osteoporosis and falls within three Primary Care Trusts in Gloucestershire. <a href="http://www.glospccag.co.uk/F&amp;OP/Report.pdf">http://www.glospccag.co.uk/F&amp;OP/Report.pdf</a>	Comments noted.
	8	Again some feedback: it is almost impossible to construct a rational, evidenced, referenced and thought full response in 1200 characters including spaces. Most of us stopped relying on ASCII text back in 1972. The artificial division into identical sized responses to hugely varying content is inexplicable and the overall impression is that you do not much value the critical appraisal of your peers. I hope you will discuss this unfavourable impression and reflect on how it could be done differently	Comment noted.
NHS Professional 11	1	I am concerned that the guidance does not encapsulate an individual's fracture risk adequately. I wonder if it right to treat those with a single previous fracture the same as those with multiple and increasingly frequent fractures. Equally I would have hoped that the guidance would allow the factoring in of additional risk factors mentioned in 2.11 especially those that confer additional fracture risk without consideration of BMD.	The 2007 ACD recommendations for secondary prevention have been revised and now recommend non-proprietary alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below. As this guidance only covers women with osteoporosis (i.e. a T score of -2.5 or below, including other risk factors would not change the guidance. The NICE clinical guideline on osteoporosis will cover the treatment of women who osteopenia.
NHS Professional 12	1	1. Different treatment thresholds for alendronate and risedronate creates significant problems in practice. Efficacy data for these agents show little difference in therapeutic benefit or toxicity (perhaps slightly better GI	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have

Consultee or Commentator	Section of ACD (if specified) - Comment	Institute Response
	<p>tolerability for risedronate). It would be better to have a single treatment threshold, recommend alendronate as a first choice and risedronate as second line for intolerant patients or patients. 2. I have grave concerns about the proposed T score thresholds in 1.3. In the presence of multiple risk factors, it is likely to be cost-effective to treat at different T score thresholds and indeed your earlier ACD reflected this. It is quite likely that we will find ourselves in clinic explaining to a 63 year old lady with history of hip fracture and a T score of -2.7 that, although she is osteoporotic by the WHO definition and would be treated without question in any civilised country, in the UK she is not cost-effective to treat (with a drug that costs less than 300 per year!), although NICE recognises and indeed has published reviews of that drug's efficacy. This is barmy.</p>	<p>withdrawn from initial treatment.</p> <p>The 2007 ACD recommendations for secondary prevention have been revised and now recommend non-proprietary alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below.</p>
3	<p>One: Cyclical Etidronate is notoriously difficult to comply with and contains no vitamin D, only calcium which at our current state of knowledge is of dubious value alone. There is little efficacy data for prevention of long bone fractures with etidronate. Compliance and tolerability of once weekly bisphosphonates is superior and the guidance should promote these over etidronate. In clinical practice, third line bisphosphonate use would include ibandronate or perhaps zoledronate (data forthcoming) - but etidronate would not be considered.</p>	<p>The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.</p>
4	<p>1. Offsetting identification costs against net treatment benefit may ignore the fact that BMD is already likely to be lower in people with risk factors (ie they are more cost effective to screen as their BMD is lower on average than the general population). The proposed 0.2 SD difference in T score in people with prior fracture (SCHARR letter) used to model identification costs in secondary prevention seems low to me, although their recommendation that screening &gt;55 in people with prior fracture is cost effective would fit well with current practice. I note that SCHARR have pointed out that sensitivity analyses indicate that variability in compliance with medication has little or no effect on the cost efficacy of the identification strategy and should not influence treatment thresholds. I would also point out that prior fracture improves compliance (clinical experience, and a study by Dr Francis) and DEXA may also be used as a tool to improve patient compliance by demonstrating severity of disease and response to treatment. Change in ICER target from 30K to 20K smacks of government pressures on health service spending - is OP a less important disease than Ca breast?</p>	<p>The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. The 2007 ACD recommendations for secondary prevention have been revised and now recommend non-proprietary alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below.</p> <p>This was a misunderstanding and has been clarified in the 2007 ACD.</p>
5	<p>You are in grave danger of producing a guideline which is refuted and objected to by every clinical expert, and in no way fits with clinical practice. SCHARR and the GDG have also provided an evidence base that can be used to cogently challenge your recommendations. If your guideline</p>	<p>Comments noted.</p>



Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		doesn't match what is perceived as ideal clinical practice (ie in centres with DEXA scanning and metabolic bone experts) it is unlikely clinicians will follow it. You will then be relying on PCT commissioners and, perhaps, public health to try and impose a guideline which clinical experts feel has been loaded in favour of cost and against effectiveness.	The Committee is requested to base their decisions on clinical and cost effectiveness, not cost alone.
	6	More research on identification costs, ie which proportion of patients with different clinical risk factors are likely to be osteoporotic and hence whether the utility of scanning younger patients with risk factors is really as poor as it appears.	Comment noted.
	8	Not sure if / when zoledronate likely to be launched; as a technology this may be more cost effective than other bisphosphonates. The 5mg iv dose currently being studied for treatment of OP appears to be a marketing gimmick; original work on the 4mg dose (cheaper and currently licensed for metastases) indicates it is likely to be effective, and for periods well in excess of 12/12 - ie potentially the most cost-effective bisphosphonate in drug costs terms. Administration costs will be the key.	Comment noted. NICE can only appraise technologies that have been referred for appraisal by the Department of Health/ WAG.
NHS Professional 13	1	It's difficult to explain to patients why you can prescribe 1 drug if they are >75 but cannot prescribe an alternative which appears to have similar clinical effectiveness because their T-score is >-2.5. It's useful to be able to transcribe guidelines to the equivalent of 1 side of A4. Difficult if alternatives once decided to treat too complex. Potentially will mean increased need for primary care to consult secondary care	The 2007 ACD gives guidance only for the initiation of secondary prevention therapy. It now recommends alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below.
	2	Is smoking associated with increased fracture risk	The Committee was not persuaded that there was sufficient evidence for smoking as a significant risk factor in women.
	4	Are we likely to see studies of sufficient size to identify any effect of drugs on fracture risk other than age and BMD? There appears to be evidence for instance in corticosteroid takers (not included in this appraisal)	Comment noted.
	6	?Any effect on fracture risk apart from age and BMD?	Comment noted.
NHS Professional 14	1	1. The advice that etidronate can be used an alternative first line treatment to alendronate is very different to current practice. I suspect that since it is so cheap, it will be first line treatment in many PCT's- is this what you envisage. If not, then change it before it is too late. Why is it not second line below generic alendronate? Why do you not state that those who cannot tolerate alendronate should be tried on etidronate. I suspect that you havn't because the members of the GDG do not beleive this is best for their patients. Please reconsider it's position. 2. The different cut offs for different treatments depending on DEXA results are very confusing and I suspect will be very difficult to use in a pragmatic clinical service. Can't you simplify it a little? 3. Imagine you are 72, have had 2 low impact fractures and a T score of -2.8 You recommend NO TREATMENT? Surely	1.The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.  2. The 2007 ACD gives guidance only for the initiation of secondary prevention therapy. 3. The 2007 ACD recommends non-proprietary alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below.

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		not? What has happened to your cost analysis that it feels so wrong? 4. Older patients with high falls risk and previous fractures are at higher risk of future fractures than those who don't fall. This is not included in your document but we feel you should have included this. Thank you	4. The Committee acknowledges that the risk of falling is important, but did not receive any evidence about the drugs' effectiveness on the fracture risk associated with the risk of falling.
	4	We assume you included the cost of Ca and Vit D prescription into the costings for all drugs. Also- the cost of checking the baseline Ca level before treatment needs to be factored in. It is difficult to assess the impact of the WHO data on assessing risk of future fracture when it is not available or published. This adds to an apparent lack of transparency. We will need to have access to many more DEXA scans and spinal xrays than before. Please include this in your information to the PCT"s for implementation or waiting lists will inevitably rise.	The cost of calcium and Vitamin D was not included in the modelling. The guidance does not specify measurement of calcium levels, but an assessment by the clinician about calcium intake.  Comment noted.
	6	It is generally understood and often stated by those interested in osteoporosis that etidronate is less good than the other bisphosphonates. Many doctors have not prescribed it for many years. We understand it is cheaper- should you not specifically ask for more research into it"s use, particularly in comparison to the other bisphosphonates. You currently have it very high up the treatment algorithm which is counter to current practice.	The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and has made the recommendation in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy
Other 1	1	Thank you for giving me an opportunity to comment on this HTA as an invited clinical expert for NICE. Of all the guidance documents by NICE this one is the most complex and difficult one to implement. There are inconsistencies in the guidance, some not robustly evidence based, making implementation for both practitioner and patient almost impossible leaving a huge unmet need, if because of confusion in interpretation or mis-interpretation, patients do not get appropriate prevention and treatment. One can see that the dilemmas faced when compounding cost and clinical effectiveness. Choosing a cut-off at 20,000 per QALY seriously undervalues osteoporosis which has a great impact on morbidity and mortality but also healthcare costs of the nation. I would urge the committee to reformat its recommendations and I would suggest taking into account the following: The guidance for secondary prevention of osteoporotic fragility fractures is unnecessarily cumbersome, difficult to follow and liable to misinterpretation. There is now clear evidence for non-BMD related risk factors to be taken into account with BMD in fracture risk assessment, yet the NICE recommendations place an undue emphasis on a BMD. The complex recommendations using a differential BMD scoring suggests differences in the different drugs which is not the basis for current practice, the result of which is an impractical guidance. There should not be a cost differential between primary and secondary osteoporosis as the eventual clinical outcomes are the same. Therefore,	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. This makes the guidance less complex. Recommendations for 2 <sup>nd</sup> line therapy will be given in the NICE clinical guideline on 'Osteoporosis: assessment of fracture risk and the prevention of osteoporotic fractures in individuals at high risk'  Re "cut-off at 20,000 per QALY": This has been a misunderstanding in the secondary prevention ACD and has been clarified in the 2007 ACD. The Committee applied the levels of cost effectiveness as outlined in the Guide to the Methods of Technology appraisal, section 6.2.6.10 and 6.2.6.11(Available from URL <a href="http://www.nice.org.uk/page.aspx?o=201974">http://www.nice.org.uk/page.aspx?o=201974</a> ).  The 2007 ACD recommendations for secondary prevention have been revised and now recommend alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below. As this guidance only covers women with osteoporosis (i.e.

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		recommendations for the use of different agents should be consistent with that for primary prevention. For simplicity, ease of interpretation and implementation, there should not be a differential T-score for decision making. Raloxifene and strontium should remain as alternatives for those intolerant to bisphosphonates and teraparotide reserved for severe osteoporosis as detailed in the document.	a T score of -2.5 or below) including other risk factors would not change the guidance.
	4	It is very surprising and inconsistent with the approach of the HTA why etidronate was included despite the following comment appearing in the document. ""However the Committee had concluded that the evidence base for etidronate was less robust than for the second generation bisphosphonates, particularly for hip and other non-vertebral fractures, and had noted that clinical experts and a number of consultees and commentators had indicated that etidronate was generally considered to be less clinically useful than alendronate or risedronate."" On this basis, Etidronate ought to be excluded from the HTA despite its very low acquisition costs.	The Committee has taken into account the reservations of consultees and commentators regarding the clinical effectiveness of etidronate, and recommended in the 2007 ACD that etidronate is no longer an option for the initiation of secondary prevention therapy.
	5	If the HTA does not get amended, simplified and clarified, it has a high risk of being unworkable, contested and most importantly mis-intepreted so that osteoporosis treatment would be a national un-met need.	The 2007 ACD gives recommendations only for the initiation of secondary prevention therapy and do not cover the treatment of women who, for whatever reason, have withdrawn from initial treatment. This makes the guidance less complex
	6	A most valuable tool would be a desk-top computer package for a 5-10 year fracture risk calculation, modelled on the WHO initiative, but modified for the UK population	Comment noted.
	7	NICE will have to consider new therapies, intravenous bisphosphonates and new biologics for osteoporosis treatment	Comment noted. NICE can only appraisal technologies that have been referred by the DH/ WAG
Patient 1	1	I am particularly concerned that postmenopausal women with confirmed osteoporosis but who have not yet sustained a fracture are not recommended for any treatment even though they have clinical risk factors which mean that they can make no lifestyle changes to prevent further BMD loss and increased fracture risk.	This comment refers to primary prevention: The Committee recommends in the 2007 ACD initiation of primary prevention therapy with alendronate for women aged 70 years and older who have one clinical risk factor and a T-score of -2.5 SD.
	2	Women with the clinical risk factors associated with prolonged limited mobility (e.g. multiple sclerosis patients)and rheumatoid arthritis sufferers are very susceptible to falls and therefore to fractures. Furthermore this risk will increase as they age and as their medical condition deteriorates. Thus they are more likely that the general population to fall sustain a fracture before the age of 75.	This comment refers to primary prevention: These risk factors are included in the primary prevention guidance under medical conditions associated with low BMD.  The age at which therapy can be initiated has been revised following the comments received.
	4	1 Compliance and persistence will be greated in women who are aware	Comments noted

Consultee or Commentator	Section of ACD (if specified) - Comment		Institute Response
		that their clinical risk factors mean that without treatment their BMD will continue to decline 2 Effects of fractures on quality of life effects will be greater for women suffering clinical risk factors which themselves reduce quality of life. Indeed these negative effects may be synergistic rather than simply additive and will result in greatly increased GP consultations and dependence on mental health and social services, and thereby greatly increased cost to society. This needs to be taken into account in both the QoL and Costs aspects of the model.	
Patient 2	1	I am 62 - early menopause at 41 - 2 pregnancies each of which required 5mths. of "bed rest" At 52 I fractured a hip through simple slip down onto floor Emergency "pin" operation on NHS Diagnosed as osteoporotic (surgeon who performed operation + DEXA scan) Developed pain in hip - required "full" hip replacement due to "pin" wearing into pelvis as a result of my osteoporosis -(private operation) Since the fracture I have received annual DEXA scans and various medications (bisphosphonates for last 2 yrs) I work diligently at exercise/hydrotherapy No family history of osteoporosis NICE accepts: 1)Postmenopausal women have an "increased risk" of osteoporosis 2)Woman who have fractured have a greater risk of a second fracture 3)After a hip fracture former mobility is not regained If this ACD becomes guidelines, the probability is that I will not meet the criteria - as I have "risk factors" that will be irrelevant and my BMD may not be low enough With the treatment stopped I would anticipate a further fracture, with associated trauma and immobility, before 65 What a bleak future for the thousands of women like myself	All comments noted  The 2007 ACD recommendations for secondary prevention have been revised and now recommend non-proprietary alendronate for the initiation of secondary prevention treatment in all postmenopausal women with a T score of -2.5 or below. As this guidance only covers women with osteoporosis (i.e. a T score of -2.5 or below) including other risk factors would not change the guidance.
Public 1		I have tried to locate the ACD for Secondary Prevention of Osteoporotic fragility Fractures in Postmenopausal Women on the NICE website (15.30hrs Frid- 20/10/06) - but it is NOT there? Therefore I can only respond on this (primary prevention) site	These comments were received in the primary prevention response section but manually moved to the secondary prevention section during comment collation.
	1	NB: These comments refer to the SECONDARY ACD - It is NOT on the website at 15.30 -Frid 20/10/06 It appears that NICE is using every machievelian trick it can think of to co-operate with its paymasters instructions to curtail drug expenditure in England/Wales 1) I can not locate the Secondary ACD on the website at 15.30hrs - 20/10/06 2) I expect my comments will be ignored as they do not come via a "registered stakeholder" - this is NOT made clear in the ACD 3) Written responses similarly will not get through the "net" as they have to be correctly referanced and arrive via a "registered stakeholder" 4)The sheer volumn and complexity of the numerous publications since 2003, with each publication varying the criteri; make it virtually impossible to comprehend 5)NICE is "cherry picking" the statistical information it uses - to ensure "cost effectiveness" is negative And so I could continue But I	The Committee carefully considered the comments received from consultees and commentators in response to the ACD.  The Committee is required to make decisions that are made on the basis of clinical and cost effectiveness.  The Institute is part of the NHS and is an independent organisation responsible for providing national guidance on treatments and care of people using the NHS in England and Wales.

Consultee or Commentator	Section of ACD (if specified) - Comment	Institute Response
	<p>consider any arguement made to NICE to be a complete waste of time  NICE is politically controlled and involved in issues it should not be The  development of medical treatment will only occur in a ""free market""  condition NICE must be abolished- forthwith</p>	