

Comparison of results between different laboratories

While the majority of currently available anti-CCP assays are based on one particular manufacturer's assay (for patent reasons), other manufacturers are actively developing their own anti-CCP assays (likely to be marketed as 'third or subsequent' generation assays). Such assays will probably produce different results and numerical values from the currently available assays. We therefore recommend caution when comparing the results (particularly numerical values) of anti-CCP antibody testing from different laboratories.

Conclusion

Assays that detect antibodies to CCP are a new and important development in the diagnosis of patients with rheumatoid arthritis, particularly during the early phases of the disease when making a definitive diagnosis on clinical grounds may be difficult. The use of anti-CCP assays and rheumatoid factor in combination provides better diagnostic and prognostic information than either test alone.

References

1. Schur PH. Anti-cyclic citrullinated peptide antibodies: diagnostic, predictive, and monitoring value in RA. *Int J Adv Rheumatol* 2005;3:77-83.
2. van Gaalen FA, Linn-Rasker SP, van Venrooij WJ, de Jong BA, Breedveld FC, Verweij CL, et al. Autoantibodies to cyclic citrullinated peptides predict progression to rheumatoid arthritis in patients with undifferentiated arthritis: a prospective cohort study. *Arthritis Rheum* 2004;50:709-15.

Further reading

- American College of Rheumatology. The use of anti-cyclic citrullinated peptide (anti-CCP) antibodies in RA. <http://www.rheumatology.org/publications/hotline/1003anticcp.asp> [cited 2006 Nov 9]
- Westwood OM, Nelson PN, Hay FC. Rheumatoid factors: what's new? *Rheumatology* 2006;45:379-85.
- Zendman AJ, van Venrooij WJ, Pruijn GJ. Use and significance of anti-CCP autoantibodies in rheumatoid arthritis. *Rheumatology* 2006;45:20-5.
- Roberts L, Barraclough D. Rheumatoid factor and cyclic citrullinated peptide antibody. In: Kellerman G, editor. *Abnormal laboratory results*. 2nd ed. Sydney: McGraw-Hill; 2006.

Conflict of interest: none declared

Self-test questions

The following statements are either true or false (answers on page 171)

9. Some patients with rheumatoid arthritis do not have a positive test for antibodies to cyclic citrullinated peptides.
10. The response to treatment of patients with rheumatoid arthritis is best assessed by serial assays of antibodies to cyclic citrullinated proteins.

Medicines Australia Code of Conduct: breaches

Medicines Australia has a code of conduct to guide the promotion of prescription drugs by pharmaceutical companies in Australia.¹ Complaints are reviewed by the Code of Conduct Committee and the results are published in its annual report. The report for 2005–06 is available on the Medicines Australia website.²

There were 27 new complaints in 2005–06. Seven are unresolved, but the report includes three complaints held over from the previous year. The Code of Conduct Committee found breaches in 11 of the complaints it finalised (Table 1).

The number of complaints coming from health professionals almost equalled the number made by companies about their competitors. In one case eight pharmaceutical companies were alleged to have breached the Code of Conduct with their advertisements in electronic prescribing software.³ The Code of Conduct Committee required six of these companies to revise their advertising.

During the year the Code of Conduct Committee had to consider whether a venue was of more than 'reasonable quality'. It also

judged if the hospitality offered to specialists was 'sumptuous' or 'simple and modest'. Probably for the first time the Code was applied across the Tasman. A cruise vessel on Auckland harbour was not considered to be an appropriate place for an educational event.

In total 11 complaints were found to have identified breaches of the Code of Conduct. Details of the complaints can be found in the annual report.² Analysis of these complaints should lead to improvements in the Code. The 15th edition of the Code of Conduct should be available in 2007.

References

1. Medicines Australia. Code of Conduct. 14th ed. Canberra: Medicines Australia; 2003.
2. 2006 Code of Conduct Annual Report. Canberra: Medicines Australia; 2006. www.medicinesaustralia.com.au [cited 2006 Nov 10]
3. Harvey KJ, Vitry AI, Roughead E, Aroni R, Ballenden N, Faggotter R. Pharmaceutical advertisements in prescribing software: an analysis. *Med J Aust* 2005;183:75-9.

Table 1

Breaches of the Medicines Australia Code of Conduct July 2005 – June 2006

Company	Complaint		Sanction imposed by Code of Conduct Committee
	Drug – brand name	Drug – generic name	
Alcon	Patanol	olopatadine	Advertisement in prescribing software to be revised
Boehringer Ingelheim	Asasantin	aspirin/dipyridamole	Advertisement in prescribing software to be revised
GlaxoSmithKline	Avandia	rosiglitazone	Advertisement in prescribing software to be revised
Pfizer	Norvasc	amlodipine	Advertisement in prescribing software to be revised
	Celebrex	celecoxib	Advertisement in prescribing software to be withdrawn
Sanofi-Aventis	Actonel	risedronate	Advertisement in prescribing software to be revised
Solvay	Zanidip	lercanidipine	Advertisement in prescribing software to be revised
Abbott	Sevorane	sevoflurane	Withdrawal of detail aid Corrective letter to everyone who received the detail aid \$25 000 fine
AstraZeneca	Symbicort	budesonide/ eformoterol	Withdrawal of promotional material Corrective letter to general practitioners and respiratory physicians \$50 000 fine
Baxter	Sponsored educational meeting during harbour cruise		No further educational meetings to be held at same or similar venue as the harbour cruise
Bayer	Levitra	ildenafil	Withdrawal of promotional material from website, and patient brochure Corrective letter to doctors invited to join register of doctors interested in men's health
Douglas	Estelle-35ED *	cyproterone/ ethinyloestradiol	Withdrawal of promotional material Corrective advertisement (same size as original) in Australian Journal of Pharmacy and other journals
GlaxoSmithKline	Seretide	fluticasone/salmeterol	Withdrawal of promotional material Corrective letter to general practitioners and respiratory physicians \$15 000 fine
Merck Sharp & Dohme	Zocor	simvastatin	Withdrawal of promotional material Corrective letter to medical practitioners \$20 000 fine
Pfizer	Somac	pantoprazole	Withdrawal of promotional material previously found in breach of the Code \$100 000 fine
Pfizer	Vfend	voriconazole	Withdrawal of promotional material \$20 000 fine
Solvay	Zanidip	lercanidipine	Withdrawal of promotional material \$30 000 fine

* See also: She needs safe and reliable contraception, not a treatment for severe acne! Estelle™-35ED (cyproterone-oestradiol) (Douglas). Healthy Skepticism. AdWatch 2006 Apr. <http://www.healthyskepticism.org/adwatch.php> [cited 2006 Nov 9]