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Valdecoxib

A Viewpoint by Tim Warner

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Valdecoxib is a new member of the phenomenally commercially successful cyclo-oxygenase-2 (COX-2) inhibitor (coxib) family of compounds. Like the better-known coxibs celecoxib and rofecoxib, valdecoxib is a selective inhibitor of COX-2. Both celecoxib and rofecoxib have been shown to have efficacies equivalent to traditional nonsteroidal anti-inflammatory drugs (NSAIDs) in the treatment of arthritic pain, and similar reports have been made regarding valdecoxib.[1] In addition, valdecoxib has been developed with an eye on the relief of acute, post-surgical pain, and to this end an injectable (intramuscular or intravenous) form has been developed, i.e. the pro-drug parecoxib. Parecoxib is rapidly metabolised to valdecoxib following injection[2] and this appears to underlie its activity. Studies with parecoxib have shown it to have significant analgesic effects in the treatment of post-operative pain,[3] comparable to those of drugs such as ketorolac,[4] but to have an apparently reduced propensity to precipitate severe gastrointestinal (GI) events.[5] So valdecoxib/parecoxib, in common with the other coxibs, appears to have similar efficacy to traditional NSAIDs but reduced GI toxicity and may well, therefore, provide an additional area of use for COX-2-selective compounds. Valdecoxib has now been approved in the US, but it appears that we will have to wait a little longer before parecoxib enters the clinic. One must wonder whether regulatory authorities are also interested in any other potential effects of valdecoxib/parecoxib, bearing in mind the current attention being paid to reports of increases in the risk of thromboembolic events associated with the consumption of some members of the coxib family of compounds. ▲

References

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