

## When Prescribing NSAIDs...



USE THE  
LOWEST  
EFFECTIVE  
DOSE



FOR THE  
SHORTEST  
PERIOD OF  
TIME

# WHY GUIDANCE FOR THE APPROPRIATE USE OF NSAIDs MATTERS

### Members of the Alliance include:



Nonsteroidal anti-inflammatory drugs (NSAIDs) are one of the most commonly prescribed medications in the United States. In 2012, approximately 98 million prescriptions for NSAIDs were filled.<sup>1</sup> Despite the recognition that these drugs may help provide effective relief of pain and inflammation, there are many patients who live in pain because they fear possible adverse events (AEs) related to NSAID use.

NSAIDs must be used appropriately to maximize their effectiveness while minimizing the likelihood of AEs.<sup>2</sup> To that end, the US Food and Drug Administration, European Medicines Agency, and numerous medical societies recommend that **NSAIDs be administered at the lowest effective dose for the shortest period of time to achieve therapeutic effect.**<sup>3-7</sup>

This guidance applies to all NSAIDs and is based on clinical evidence that the risk of AEs increases with increased NSAID dose and duration of use to varying degrees depending on the drug. In 2 case-control studies, the risk of acute renal failure increased 50% to 240% with high-dose NSAID use relative to low dose (RR 1.5 to 3.4).<sup>8,9</sup> In another case-control study, the risk of myocardial infarction increased 28% with high-dose vs low-dose NSAID use (RR 1.28), 20% with use longer than 1 month (RR 1.2), and 35% with use longer than 3 years (RR 1.35).<sup>10</sup> In 2 meta-analyses, the risk of upper gastrointestinal (GI) complications increased 70% to 230% with high-dose vs low-dose NSAID use (RR 1.7 to 3.3),<sup>11</sup> and the risk of upper GI bleeding increased 230% to 540% (RR 3.3 to 6.4) without accompanying gastroprotection.<sup>12</sup>

At present, physician adherence to the guidance pertaining to appropriate use of NSAIDs is low, ranging from 27% to <50%, even in patients at high risk for AEs.<sup>2,13</sup> Inappropriate use of NSAIDs by patients is also common, with 38% of patients using prescription and over-the-counter (OTC) NSAIDs at the same time, and 26% of OTC and 8% of prescription NSAID users taking a higher dose than recommended.<sup>14</sup>

The Alliance for Rational Use of NSAIDs—a public health coalition—aims to bridge the gap between guidance and clinical practice, educating health care professionals and the public at-large to ensure safe and appropriate use of NSAIDs.

**To download educational materials and learn more about the Alliance for Rational Use of NSAIDs, visit [www.NSAIDAlliance.com](http://www.NSAIDAlliance.com).**

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