

practice-based research networks.<sup>2</sup> Card studies are, by definition, brief and limited in scope.<sup>2</sup> Our study was developed and conducted using participatory methods.<sup>3</sup> Thus, the method of administration and selected list of variables were chosen by the participating primary care practice champions to maximize simplicity during administration and minimize impact on clinical workflow. Finally, we considered excluding overweight and nearly overweight adults from our response sample, but sensitivity analysis without their responses found no changes in our primary outcomes; thus we chose to leave them in the sample.

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## Re: Presenting Signs of Multiple Myeloma and the Effect of Diagnostic Delay on the Prognosis

*To the Editor:* The article by Goldschmidt et al<sup>1</sup> addresses an important issue of the impact of early diagnosis in the outcome of patients with multiple myeloma. The authors mention that some have advocated use of serum-free light-chain assay (SFLCA) for “screening.” SFLCA has been promoted for diagnosing, determining the prognosis, and monitoring of monoclonal gammopathies.<sup>2</sup> However, empirical evidence suggests a far more limited role for SFLCA. Serum protein electrophoresis and serum immunofixation electrophoresis are the gold standards for diagnosis;<sup>3</sup> these two alone are sufficient to diagnose about 95% cases. Patients with light-chain gammopathy can be detected by urine protein electrophoresis and urine immunofixation electrophoresis. Among patients without monoclonal gammopathy, the  $\kappa$ -to- $\lambda$  ratio is abnormal in >35%, and the false-positive rate is about 55% in patients with polyclonal hypergammaglobulinemia.<sup>4</sup> In monoclonal gammopathy there is an overall 27% false-negative  $\kappa$ -to- $\lambda$  ratio. The false-negative rate is up to 67% for patients with monoclonal gammopathy of undeter-

mined significance.<sup>5</sup> SFLCA and  $\kappa$ -to- $\lambda$  ratio have virtually no role in the diagnosis of monoclonal gammopathy, as an abnormal  $\kappa$ -to- $\lambda$  ratio is not diagnostic of monoclonal gammopathy and a normal  $\kappa$ -to- $\lambda$  ratio does not exclude monoclonal gammopathy.<sup>6</sup>

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The above letter was referred to the author of the article in question, who offers the following reply.

## Response: Re: Presenting Signs of Multiple Myeloma and the Effect of Diagnostic Delay on the Prognosis

*To the Editor:* We thank Dr. Gurmukh Singh for his response. We are not advocating screening for multiple myeloma using a serum-free light-chain assay, and we agree with Dr. Gurmukh Singh that no evidence exists for the efficacy of serum-free light-chain testing in asymptomatic individuals. However, we suggest that this might be a worthwhile diagnostic test for patients with unexplained back pain and other “red flag” signs or symptoms, in whom multiple myeloma is suspected.

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