Soluble mesothelin-related peptides and fibulin-3 as biomarkers of response to treatment in malignant mesothelioma

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We aimed to determine soluble mesothelin-related peptides (SMRP) and fibulin-3 levels in malignant mesothelioma (MM) patients before treatment and in various responses to treatment and to investigate whether SMRP and fibulin-3 levels could be useful in evaluating tumor response to treatment.

The study included 78 patients with MM. SMRP levels were determined by ELISA assay and fibulin-3 levels by enzyme- linked immunosorbent assay.

Occupational asbestos exposure was confirmed in 86% MM patients. SMRP levels pre-treatment and in progressive disease were significantly higher than in stable disease, partial and complete response. Fibulin-3 levels were significantly higher in progressive disease as compared to the levels in stable disease, partial response and complete response to treatment.

Our findings suggest that SMRP may be a useful tumor biomarker for evaluating tumor response to treatment and detecting the progression of MM and that fibulin-3 could be helpful in identifying the progression of the disease.