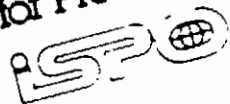


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**21. 100 INCREASED ACCURACY OF ANTI-MALIGNIN ANTIBODY
DETERMINATION IN UNSTORED SERA PERMITS SCREENING**

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The effect of freezing and storage of serum on the incidence of false-positive and false-negative results was examined retrospectively in each of 3,093 double-blind determinations of anti-malignin antibody in serum (AMAS) from 3 separate studies, in 3 different laboratories, with constant methods and criteria (Proides Biol Fluids 31:739-747, 1984). False-negatives in non-terminal cancer patients were 7.3% in sera stored frozen 2 to 14 days ("stored") (N=247) vs 0% in sera tested within 24 hours of the time blood was drawn ("24Hr") (N=20) (cancer/controls p < .001). False-positives in stored control sera were 6.7% (N=178) and 7.7% (N=463), but in 24Hr control sera were 0% (N=65).

In 1,713 sera screening repeatedly 503 chemical workers possibly exposed to carcinogens for years, false-positives increased with days of serum storage from 6.8% (N=279), to 8.3% (N=1,133), to 12.0% (N=183), to 14.4% (N=118). Repeat false-positives in stored sera were 1.8% (N=224), but in 24Hr sera were only 0.4% (N=279, specificity 99.6%). In agreement with the 24Hr repeat test results, no clinical cancer developed in any worker within one year. The effect of storage also may be relevant to HIV I and III antibodies and to other immunological tests.

ANTI-MALIGNIN ANTIBODY/AMAS/ACCURACY/STORED SERUM/SCREENING