

Tissue Bank Protocol Processing of Pleural Effusions

January 2005. Lisa Devereux

Patients should be consented for Tissue Bank, ensure that fluid is taken to Pathology should cytology be ordered. Only collect what is excess to diagnostic needs.

Working in the hood, place fluid into 50ml tubes for centrifugation. Record the total volume fluid processed.

Spin at 4 deg C, 1000 rpm (450 G) for 15min.

Decant fluid into waste.

Gently resuspend cells in 50ml cold PBS. Spin at 4degC, 1000rpm, (450G), 10min.

Combine all pellets into one tube. Wash with 50ml cold PBS , 4degC 1000rpm 10min.

Take approximately 100ul of the cell pellet and make a smear on a microscope slide. Process in histopathology using the Quick Stain H&E procedure. This is to give an estimation of tumour cell content.

Transfer the pellet into freezing vials marked with P number and specimen number. Divide according to size of pellet. Absolute figures difficult to provide but try to freeze at least 2 and no more than 6 vials.

Notes

Fluid may also need to be frozen for proteomic analysis

Cells can also be frozen in Trizol

Whole effusion could also be frozen.

This all depends on what you envisage the end application to be.