

P037 Analysis of prostate tumour cell invasion using BD FluoroBlok™ Insert systems and the FLUOstar OPTIMA fluorescence microplate reader.

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The mechanism of prostate metastasis to bone marrow stroma is a complex multistage process, the mechanisms of which are only now beginning to become apparent.

We set out to investigate whether the BMG Labtech FLUOstar OPTIMA was able to support the BD FluoroBlok™ assay for real-time prostate tumour cell invasion as compared with a fixed time point assay using an external incubator.

Over a 21 hour period the FLUOstar OPTIMA fluorescence plate reader maintained optimal invasion conditions for the FluoroBlok™ invasion assay enabling the collection of real-time invasion data. Real time data mirrored data from the fixed time point assay. The FLUOstar OPTIMA system benefits from rapid multiple sampling of the assay without altering the external conditions during data collection.

The FLUOstar OPTIMA can be combined with the FluoroBlok™ tumour cell invasion system to follow cell invasion in real time, allowing rapid and frequent data acquisition whilst maintaining optimal assay conditions.