

Before long, cancers
may be diagnosed more
accurately—using Light...

Making better cancer diagnoses

Raman spectroscopy has powerful potential as a cancer diagnostic. Tissue samples illuminated by a special laser give off “Raman-scattered” light spectra that contain very accurate *fingerprints* of biochemical composition—for a positive ID of cancerous tissue!



The problem is, human tissues also emit *fluorescence* which seriously interferes with the Raman data. Fortunately, Hamamatsu has been able to help...

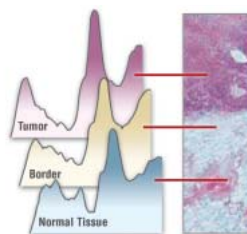
Solving the fluorescence problem

Recently, Hamamatsu developed a very fast, high-efficiency, multi-channel detector for *near-infrared* Raman spectroscopy—using 1064nm light.

Researchers are finding that this can bypass the

Hamamatsu is opening
the new frontiers
of Light * * *

fluorescence problem and enable high-reliability diagnoses. It even opens the possibility of using



Raman spectral analysis can clearly distinguish between cancerous and normal tissue.

Raman spectroscopy on *live tissue*, through light-fiber probes.

It's about giving doctors and their patients better answers, faster.

It's about better medicine. And

Hamamatsu is delighted to be contributing!

For science, for mankind, Hamamatsu is helping to open the new frontiers of Light.

www.hamamatsu.com

HAMAMATSU

The Frontiers of Light