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MELBOURNE
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FORCES –
ACCELERATING
PROGRESS



A novel blood test for resection & recurrence monitoring

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FLINDERS CENTRE
for INNOVATION
in CANCER



“A blood test for tumour monitoring”

S.Pedersen

Colorectal Cancer

Worldwide 1M new cases per year

Surveillance after curative surgery

Metastases will develop in 30%

CEA blood testing, CT, Colonoscopy

Recurrence often detected too late

New test for recurrence monitoring?

2-gene (*BCAT1/IKZF1*) methylation test
detects tumour DNA in blood

Young et al. Gastroenterol 2014;146(5,Suppl 1):S56-S57.

Methylated DNA in blood in CRC patients

Pre surgery

After surgery

30 +ve

22 (73%) negative
6 (20%) reduced levels

Tumour DNA clears after resection

“A blood test for tumour monitoring”

S.Pedersen

89 cases post CRC resection

Blood tested at a median 10 months
for CEA and methylated DNA

		No. Positive Test	
CT findings	#	Methyl DNA	CEA
Recurrence*	8	7 (88%)	1 (13%)
Other cancer	3	2 (67%)	0
Pending	17	8 (47%)	0
No disease**	61	7 (11%)	0
Total	89	24 (27%)	1 (1%)

*McNemar's test, p-value: 0.04

**McNemar's test, p-value: 0.02

2-gene blood test is a better indicator
for recurrence than CEA testing