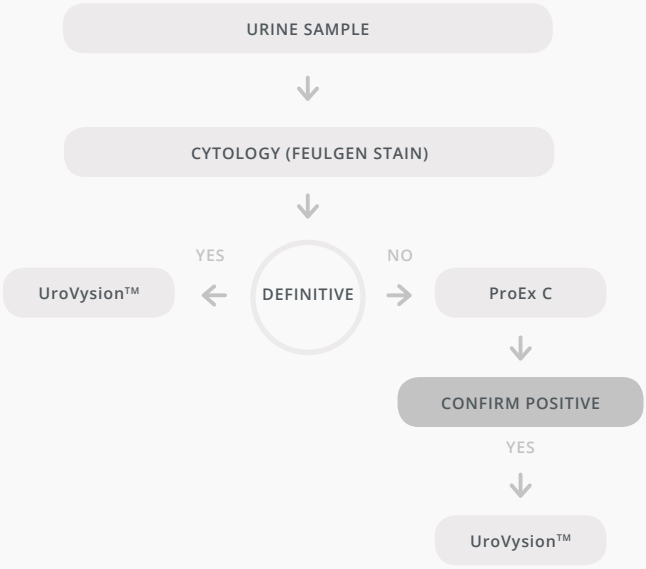
Pathnostics

INNOVATION IN BLADDER CANCER

How to manage costs without losing quality

A Better Way to Detect Bladder Cancer



Performance parameters	ProEx C	UroVysion
TP (*n*)	16	10
TN (*n*)	7	4
FP (*n*)	2	5
FN (*n*)	2	8
Sensitivity (%)	88.9	55.6
Specificity (%)	77.8	44.4
PPV (%)	88.9	66.7
NPV (%)	77.8	33.3

Two-tail paired t-test P: 0.0033. ProEx C versus UroVysion. TN: True negative, TP: True positive, FN: False negative, FP: False Positive, PPV: Positive predictive value, NPV: Negative predictive value, FISH: Fluorescence *in situ* hybridization

How you can manage costs without losing quality A Better Way to Detect Bladder Cancer ProExC labels the cell cycle proteins, minichromosome maintenance protein-2 (MCM2) and topoisomerase II-a (TOP2A). MCM2 belongs to the DNA licensing factor family whereas TOP2A is an enzyme that unravels DNA for DNA replication, transcription, chromosome segregation, and cell cycle progression.

Both MCM2 and TOP2A have been demonstrated as being over-expressed whenever cells enter an abnormal S-phase cell proliferation.

ProExC is a more economical method for confirming positive cases of bladder cancer as compared to Urovysion™ FISH

Cases with blood in the urine are first reviewed by routine cytology.

- Those with atypical cells or are positive for ProExC are reflexed to Urovysion™ FISH testing to rule out bladder cancer.
- Those cases that are not definitive are confirmed positive by ProExC then reflexed to Urovysion™ FISH
- Cases with positive UroVysion™ FISH results but negative biopsies have a high frequency of presenting within 12 months.

References:
1. Chang, S. S. (2015). Comparative study of ProEx C immunocytochemistry and UroVysion fluorescent in-situ hybridization assays on urine cytology specimens. *CytoJournal*, 2-12.