

Abstract 5806; First results from BladderPath: A randomised trial of MRI versus cystoscopic staging for newly diagnosed bladder cancer

**Nicholas James**, S. Pirrie, W. Liu, K. Jefferson, J. Gallagher, A. Hughes, A. Knight, V. Nanton, H. Mintz, A. Pope, H. Doyle, J. Singh, S. Hafeez, P. Patel, J. Catto, R.T. Bryan

# Conflicts of interest

- The authors report no conflicts of interest for this presentation

# Standard diagnostic pathway

- Flexible cystoscopy → rigid cystoscopy and resection
  - Serves as tissue diagnosis and staging
  - Re-resection often needed
  - Disrupts accuracy of subsequent imaging
  - Is **not** definitive treatment for muscle-invasive disease which is often very delayed
- Most tumour sites separate tissue diagnosis and staging and use primary imaging not piecemeal resection for staging

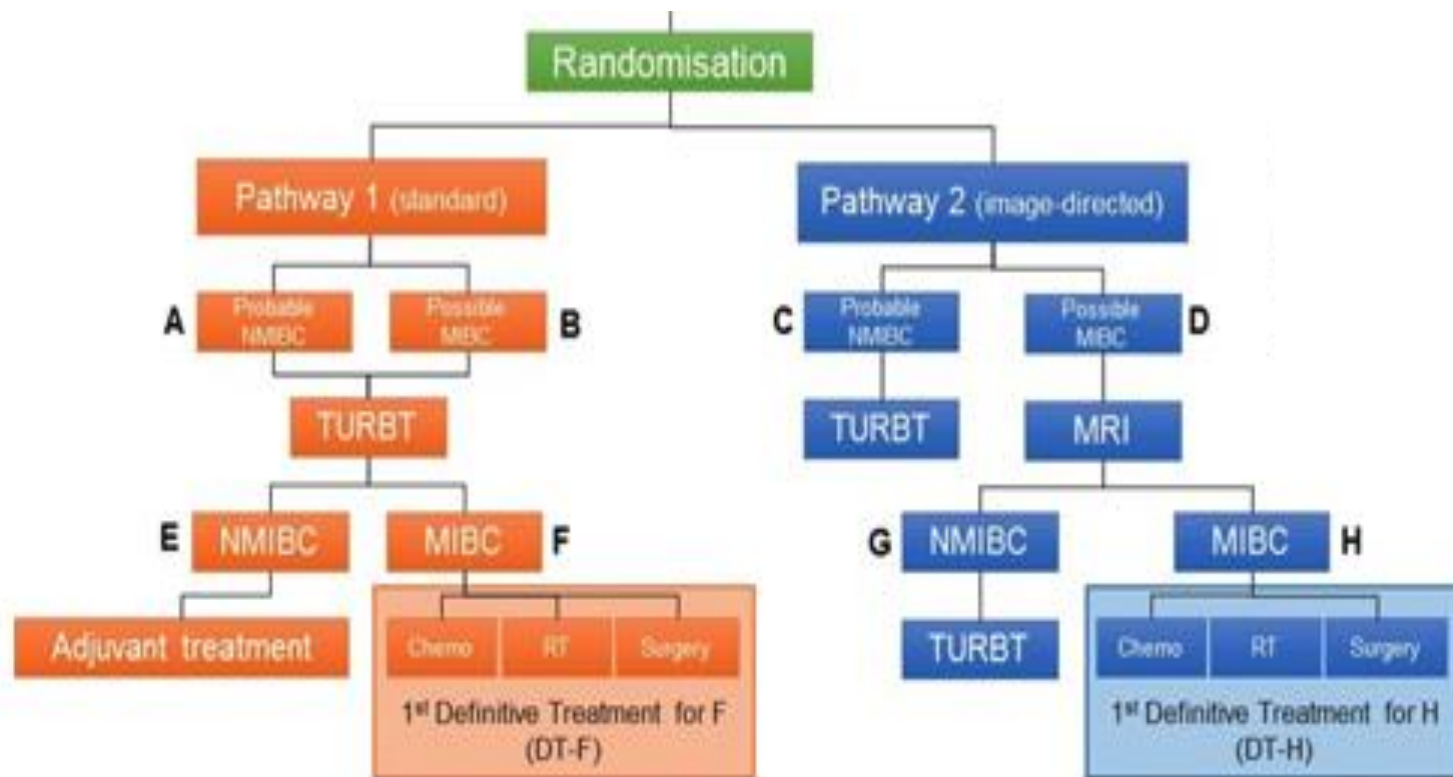
# BladderPath key trial design features:

## Feasibility stage

- A minimum of **80%** of patients on MRI pathway complete as planned
- Outcome Feasibility: **37/39 95% CI** (83%, 99%) followed protocol

## Efficacy stage

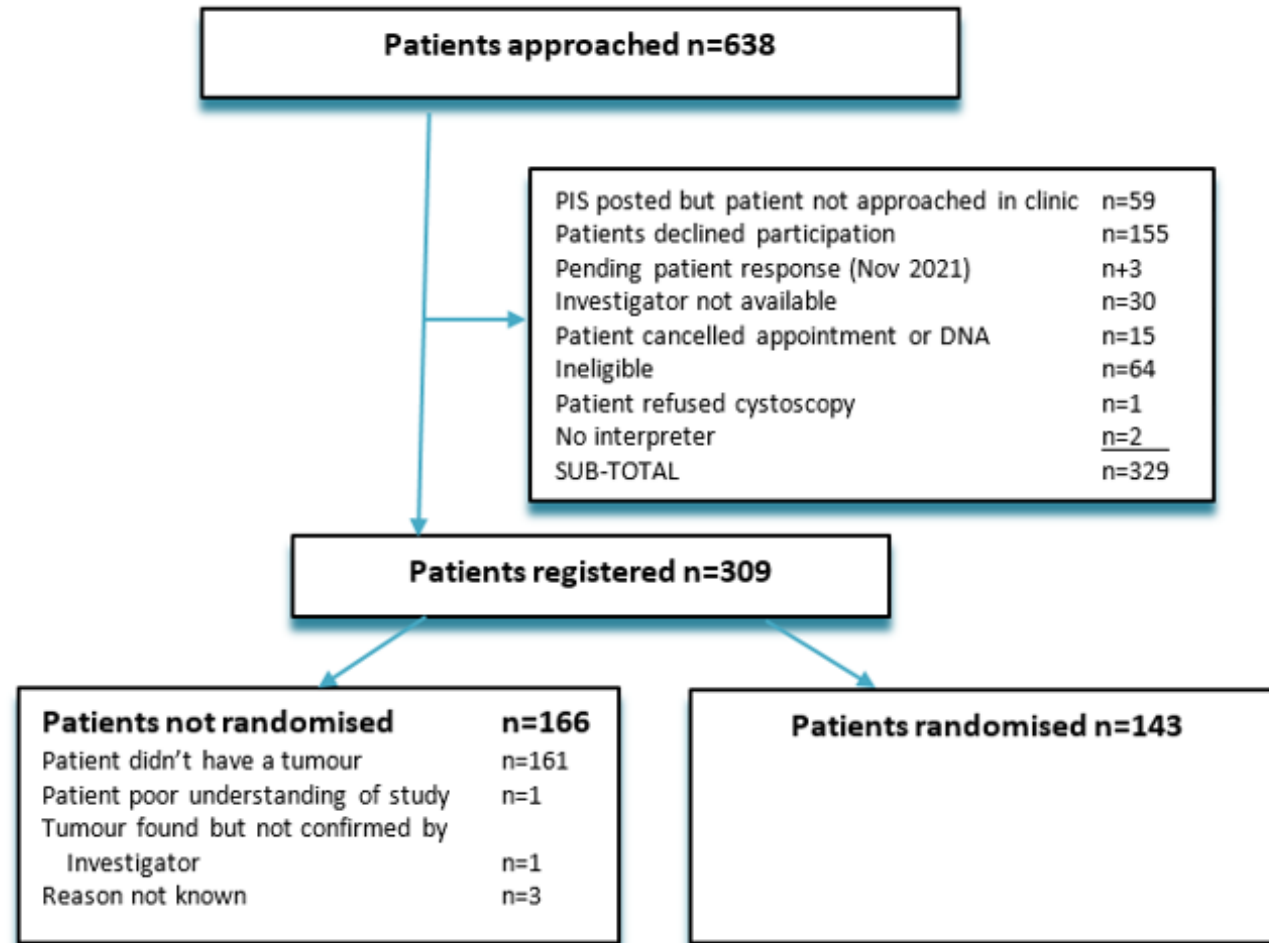
- **Primary outcome**
- A reduction of at least **30 days** in time to correct treatment (TTCT) for **muscle-invasive** bladder cancer (MIBC)
- **Secondary outcomes**
- TTCT for all patients
- TTCT for Non-MIBC



**Probable** non-invasive vs **Possible** muscle-invasive disease by clinical assessment on 5-point scale:

1. Strongly agree that the lesion is non-muscle-invasive
2. Agree that the lesion is non-muscle-invasive
3. Equivocal
4. Agree that the lesion is muscle-invasive
5. Strongly agree that the lesion is muscle-invasive

# Recruitment – CONSORT Diagram



# Patient characteristics

Table 4.4: Stratification Factors by Pathway

<b>Trt</b>	<b>Pathway1 (72)</b>	<b>Pathway2 (71)</b>	<b>Overall (143)</b>
<b>Sex</b>			
Male	55 (76.4)	53 (74.6)	108 (75.5)
Female	17 (23.6)	18 (25.4)	35 (24.5)
<b>Age</b>			
Less Than 75	48 (66.7)	49 (69.0)	97 (67.8)
75 or Above	24 (33.3)	22 (31.0)	46 (32.2)
<b>Initial clinician assessment</b>			
Probable NMIBC	34 (47.2)	32 (45.1)	66 (46.2)
Possible MIBC	38 (52.8)	39 (54.9)	77 (53.8)

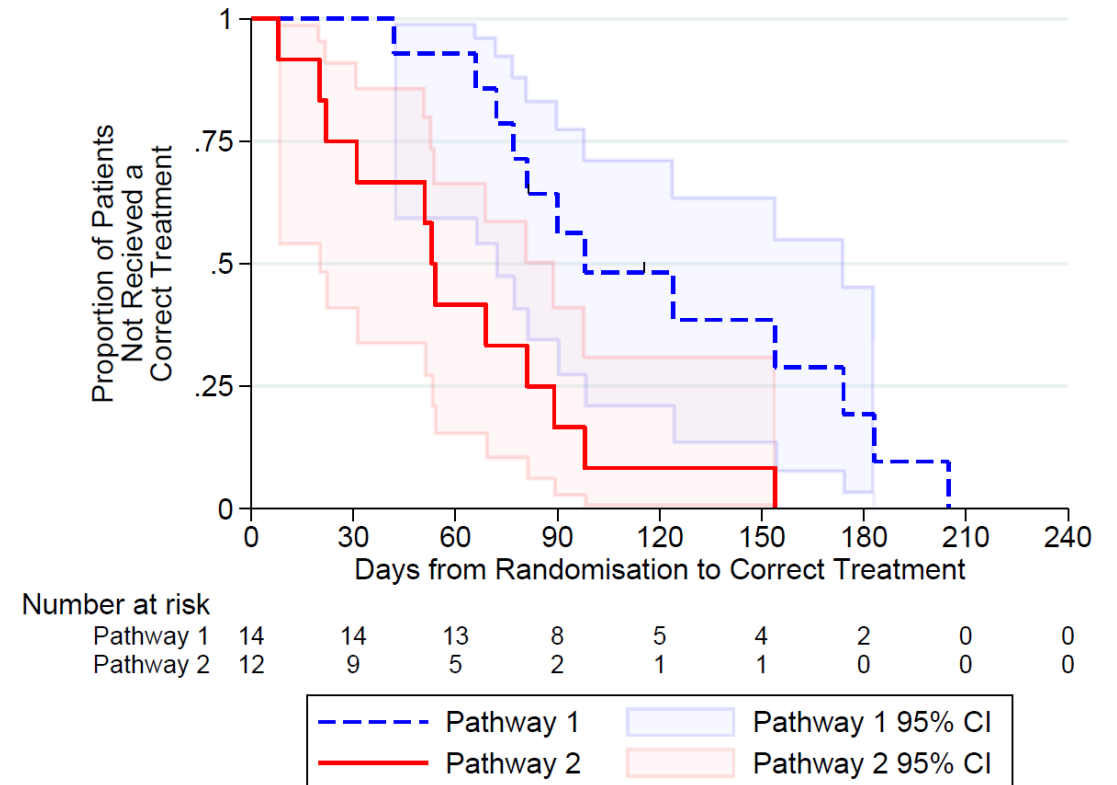
# Primary Outcome for efficacy stage

**Primary Outcome:** Time to correct treatment (TTCT) for patients confirmed to have MIBC

- Median TTCT for pathway 1: **98 days** (95% CI. 72, 174) N=14
- Median TTCT for pathway 2: **53 days** (95% CI. 20, 89) N=12

**Secondary Outcome:** Time to definitive treatment (TTDT) for all patients

- Median TTDT for pathway 1: **23 days** (95% CI. 17, 29) N=72
- Median TTDT for pathway 2: **22 days** (95% CI. 17, 32) N=71

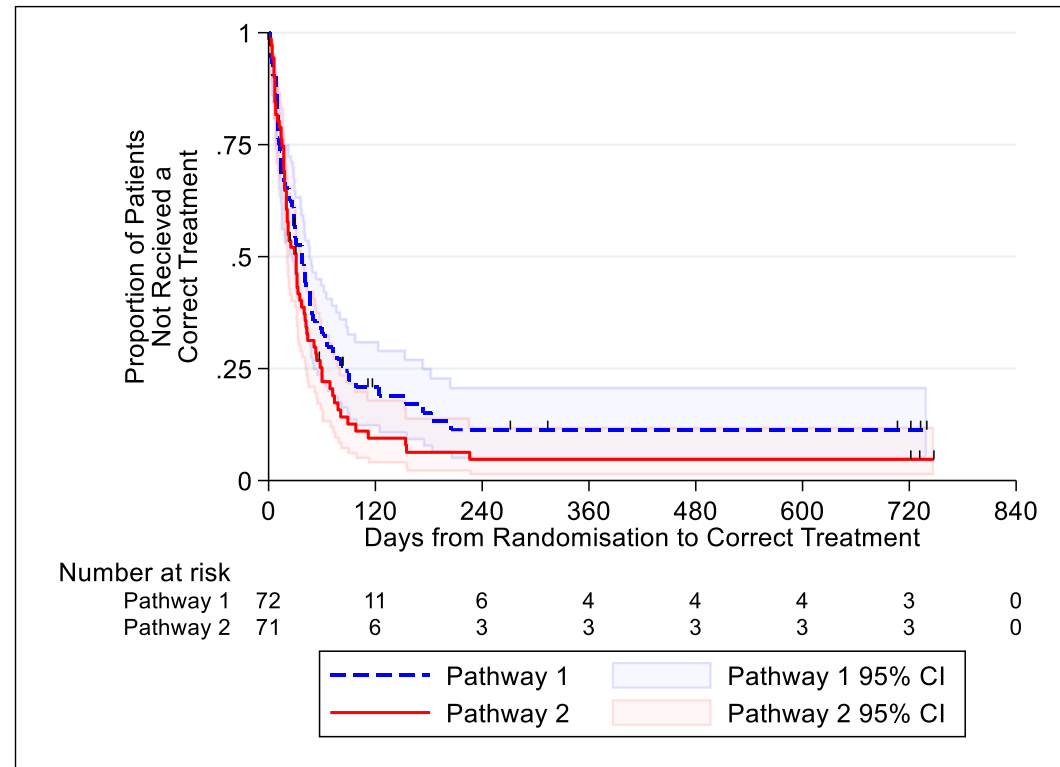


Logrank test: **p-value = 0.0046**

Cox model adjusted for gender and age : HR (Pathway 2 vs. Pathway 1) = 3.4 (95% CI. 1.4, 8.3).

# Secondary Outcome: Time to correct treatment (TTCT) for all patients

- Median TTCT for pathway 1: 37 days (95% CI. 26, 47) N=72
- Median TTCT for pathway 2: 31 days (95% CI. 20, 37) N=71
- Logrank test: p-value= 0.1435
- Cox model adjusted for gender and age : HR (Pathway2 vs. Pathway1)=1.3 (95% CI. 0.9, 1.8). Proportional-hazards assumption checked.





# Conclusions: BladderPath

- Using a Likert scale at flexible cystoscopy accurately identifies the lower risk non-invasive cases
- An image-based pathway substantially accelerated time to definitive treatment for patients with suspected muscle-invasive disease
- There was no adverse effect on times to treatment for non-invasive disease
- Patients with obvious muscle-invasive disease can potentially avoid the need for TURBT and associated risks