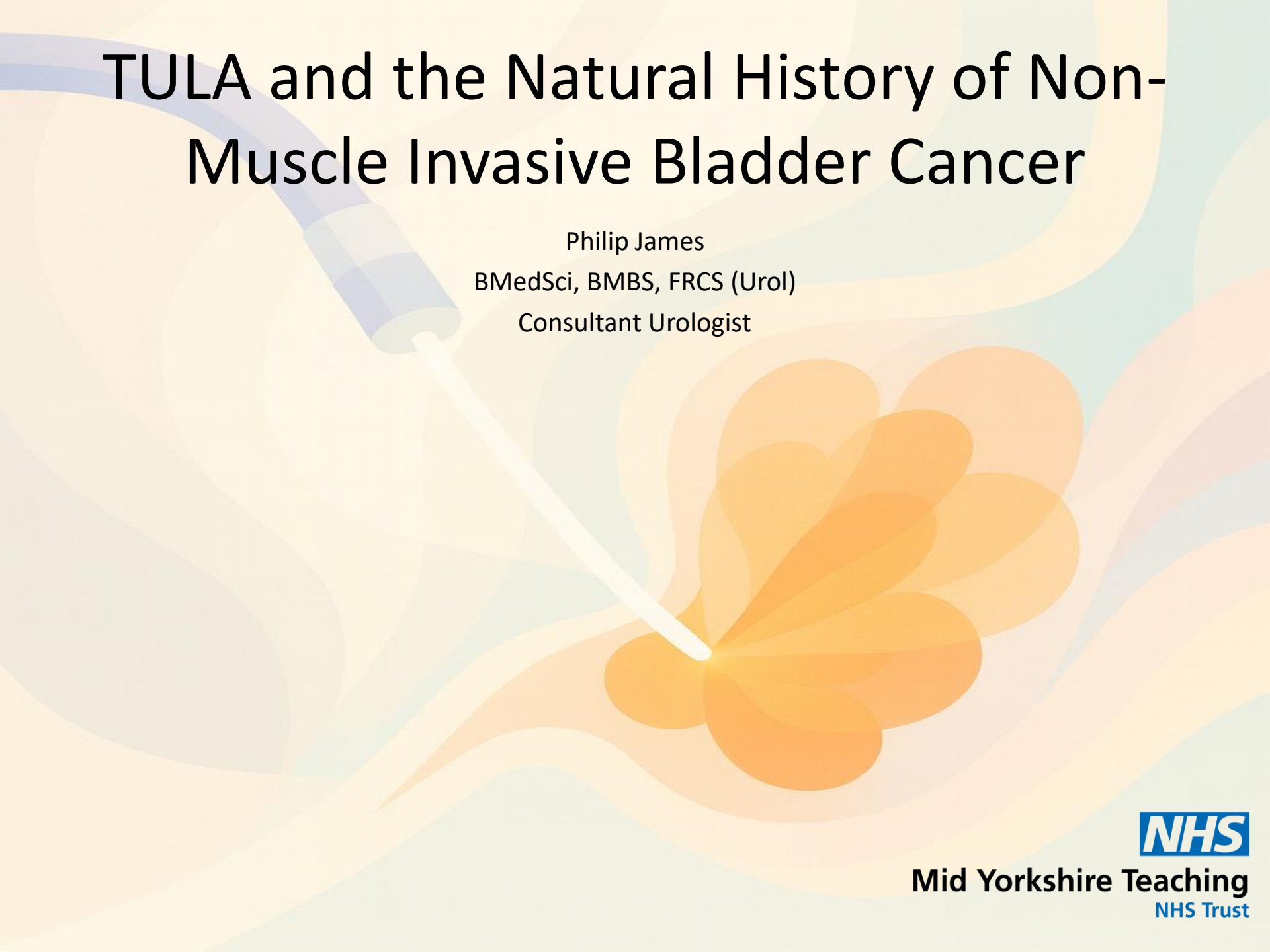
TULA and the Natural History of Non-Muscle Invasive Bladder Cancer

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What is TULA?

- Outpatient laser ablation under LA
- Dual-wavelength 980/1470 nm
- Minimally invasive; no GA
- See-and-treat; rapid recovery

How TULA Is Performed

- Flexible cystoscope + laser fibre
- Modes: ablation, coagulation, coring
- LA only; no anticoagulation stop
- Simplified pathways

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Why TULA?

- Avoids GA
- Lower risk than TURBT
- Minimal bleeding
- Fast pathways
- Ideal for surveillance

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Patient Selection

Ideal:

- LG Ta, few tumours, ≤3 cm
- Frail/unfit for GA
- On anticoagulation

Not suitable:

- Suspicious for MIBC
- Extensive lesions

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GIRFT Guidance (2025)

- Routine TULA adoption
- 50–60% recurrent NMIBC suitable
- Consultant-led delivery
- Mandatory audit & PROMs

Pipeline Capacity Impact

- Frees 25–30% theatre capacity
- Shorter waits
- Prioritises urgent TURBT
- Reduces GA burden

Evidence Base

- Strong safety data
- Non-inferior recurrence (LG)
- Excellent tolerability
- Gaps: long-term outcomes

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TULA in NMIBC Pathway

- First-line for recurrent LG
- See-and-treat surveillance
- Palliative control
- Avoid repeated GA

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Quality of Life

- Minimal pain
- High satisfaction
- Quick return to activities

Economics

- Saves £1,200–£1,500 per case
- Avoids admission & GA
- Large national savings

Natural History of NMIBC Managed within an Outpatient-Based TULA Clinic

Kohei Yamada[1], Nicole Wann Jie Lim[1], Zelig Ho[1], Faria Antara[1], Vasinavi Bose[1], Salman Anwar[1], Hira Syed[1], Sarosh Janardanan[1], Philip James[1], Sachin Agrawal[1]

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Natural History Study

- 388 NMIBC patients (2017–2024)
- Largest UK TULA dataset

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Study Objectives

- 1. OS & CSS
- 2. Recurrence & progression
- 3. TULA in elderly/frail

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Methods

- Retrospective database
- Demographics, CCI, histology
- KM survival + Cox models

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Cohort Characteristics

- N=388; 1021 TULAs
- Age 75.7; CCI 6.6
- Mean follow-up 36 months

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Survival Outcomes

- OS 63.5% at 5 yrs
- CSS 93.1% at 5 yrs
- Median OS/CSS not reached

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Causes of Death

- 104 deaths
- 16 BC deaths (4.1%)
- Majority due to comorbidity

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Recurrence & Progression

- Recurrence: 30.8% (1 yr), 37.5% (5 yr)
- Progression: 5.8% (1 yr), 10.6% (5 yr)

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Predictors

- OS: age, CCI
- CSS: EORTC progression risk

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TULA in Frail Patients

- Avoids GA, reduces harm
- Adequate control for most
- Supports conservative pathways

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Clinical Implications

- Balance tumour biology + frailty
- Use TURBT when needed
- Symptom-led care for selected

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Conclusions

- Safe, effective
- Low BC mortality
- Supports GIRFT
- Need composite risk tools