ICS 2026 E-POSTER | CLINICAL RESEARCH

Repeated PRP urethral sphincter injections safely improved post-prostatectomy incontinence in 40.8% of men — with baseline bladder capacity predicting success.

Chia-Cheng Yang, Min-Ching Liu, Yuan-Hong Jiang, Hann-Chorng Kuo

Department of Urology, Hualien Tzu Chi Hospital & Tzu Chi University, Hualien, Taiwan

www.ics.org/2026/abstract/#689

BACKGROUND & PATIENT SELECTION

- **Clinical problem:** Intrinsic sphincter deficiency (ISD) causes refractory PPI. Invasive slings and AUS have high cost and revision risks.
- **Study cohort (N=71):** SUI refractory ≥12 mos post-RP; pure ISD verified by videourodynamics (VUDS).

4× Monthly Sphincter Injections

5 mL autologous PRP (3.4× concentration ratio) injected into 5 external sphincter sites (2, 5, 7, 10, 12 o'clock). Primary endpoint: GRA at 3 months post-4th injection.

CLINICAL OUTCOMES (N=71)

SUI VAS	UDI-6 Score	ALPP (cmH_2O)
7.1 → 5.2	5.4 → 3.9	109 → 134
p < 0.001	p < 0.001	p = 0.014

Global Response Assessment (GRA) — 40.8% Success

- Social Dryness: 19.7%
- Moderate Imp: 21.1%
- Mild Imp: 38.0%
- Failure (≤0): 21.1%

High safety: 0% urinary retention or erosion; only 11.3% self-limiting mild dysuria.

PREDICTIVE FACTORS (SUCCESS VS FAILURE)

Variable	Success (n=29)	Failure (n=42)	p-value
Baseline CBC (mL)	310.4 ± 142.3	250.5 ± 98.0	0.041*
Baseline SUI VAS	6.4 ± 1.7	7.7 ± 1.6	0.002*
Δ ALPP Surge (cmH_2O)	+49.3 ± 78.3	+4.9 ± 52.4	0.028*
Post-tx IIQ-7	3.78 ± 2.5	9.32 ± 5.4	<0.001*

Independent Predictor (Logistic Regression)

Baseline CBC was the only significant independent predictor (**p = 0.047**). Low capacity (≤250 mL) reflects impaired reservoir compliance.

LONG-TERM DURABILITY (MEDIAN 2.7 YEARS)

45.1%
Remained satisfied without surgery

18.3%
Proceeded to Sling / AUS

KEY CLINICAL TAKEAWAY

PRP is a safe, minimally invasive bridge therapy before invasive surgery. Screening for **baseline CBC ≥ 300 mL** identifies optimal responders with sufficient functional bladder reserve.