

# Rezūm water vapor thermal therapy for large-volume

Francesco Greco<sup>a,\*</sup>

<sup>a</sup> Urology Unit, Centro Salute Uomo, Bergamo, Italy.

Benign prostatic hyperplasia (BPH) is a common, non-cancerous enlargement of the prostate in aging men, presenting with lower urinary tract symptoms (LUTS). For small and medium-sized glands, transurethral resection of the prostate (TURP) is considered a traditional and widely used surgery, recognized as the gold standard while open prostatectomy is considered the preferred surgery for larger prostates (> 80 grams). The innovation of BPH operation management aims to reduce the incidence rate of operation and shorten the operation time, while maintaining satisfactory relief of lower urinary tract symptoms caused by BPH. The recently updated guidelines of the American Urological Association (AUA) also reflect these changes. Rezūm, as a minimally invasive transurethral steam therapy, exhibits fewer side effects and less invasiveness. This therapy represents a paradigm shift in the treatment of BPH, providing an alternative to drug therapy and traditional surgical intervention.

Due to the fact that most patients require a urinary catheter to assist in bladder drainage for 2 to 7 days and be removed during follow-up, mild discomfort, urgency to urinate, and hematuria are common in the first week, and may even worsen urinary tract symptoms. But usually improvement occurs within 2 to 6 weeks, with the maximum benefit evident within 3 months. Mynderse et al. demonstrated that after treatment with Rezūm, the ablation volume decreased by 91.5% at 3 months and 95.1% at 6 months [1]. Kathrin et al. found that 92.4% of patients successfully removed the catheter after a median of 5 days. Postoperative urinary symptoms significantly improved, with IPSS decreasing by 54.3% and quality of life decreasing by 33% two months after treatment. The IPSS and quality of life of the patient have improved and remained good during the 4.5 year follow-up period.

The incidence of Clavien Dindo complications  $\leq$  type II is 11.8% [2]. In this issue of *Uro-Technology Journal*, Khaled et al. evaluated the efficacy of Rezūm steam thermal ablation therapy in the conventional drug treatment of benign prostatic hyperplasia using tamsulosin. Research has shown that Rezūm therapy has high efficacy in alleviating LUTS in BPH patients with fewer complications [3]. But the question still remains: Does Rezūm have long-term treatment stability for patients with glandular sizes > 80 milliliters?

Basri reports a re-treatment rate of 2.1% at one year [4], consistent with the reported by Darson et al. [5] and 3.7% by Roehrborn et al. at two years [6]. Mohamed reported that in the large prostate group, 5 patients continued to take alpha blockers, 2 patients received repeated Rezūm treatment, and 11 patients received B-TURP treatment, experiencing a higher rate of re treatment during long-term follow-up. Based on this, further prospective and comparative studies are needed, especially in the area of alternative surgical options for managing large prostate.

BPH remains a significant clinical challenge due to its widespread occurrence and its profound effects on the quality of life in older men. Among the available treatment modalities, Rezūm water vapor therapy has emerged as a valuable minimally invasive approach. Rezūm provides substantial symptom relief while avoiding many of the risks associated with more invasive surgical options, such as TURP. Its favorable safety profile, including minimal adverse effects and the preservation of sexual function, makes it particularly attractive to patients seeking a balance between efficacy and quality of life. Given these characteristics, Rezūm represents an important therapeutic option, positioned between long-term pharmacological management and traditional surgical interventions.

Future research will help clarify the optimal use of Rezūm therapy, particularly regarding its role in managing larger prostate sizes and refining patient selection guidelines. Comparative studies against traditional surgical and emerging minimally invasive techniques will also help delineate its precise position within the treatment algorithm for BPH. Ultimately, "To Rezūm or not to Rezūm" is best decided through shared decision-making, where patient preferences, comorbidities, and anatomical factors guide

\* Corresponding author: Francesco Greco

Mailing address: Urology Unit, Centro Salute Uomo, Bergamo, Italy.

Email: francesco\_greco@ymail.com

Received: 29 December 2025 /

Accepted: 29 December / 30 December 2025

individualized treatment planning. In an era emphasizing both efficacy and quality of life, Rezūm's proven track record for sustained symptom relief, low complication rates, and sexual function preservation secures its place in the evolving landscape of BPH management.

## Declarations

**Ethical statement:** Not applicable

**Availability of data and materials:** Not applicable.

**Financial support and sponsorship:** None.

**Conflicts of interest:** Francesco Greco is a member of the editorial board of *Uro-Technology Journal*. The authors declare that they have no conflicts and were not involved in the journal's review or decision regarding this manuscript.

## References

1. Mynderse LA, Hanson D, Robb RA, Pacik D, Vit V, Varga G, et al. Rezūm system water vapor treatment for lower urinary tract symptoms/benign prostatic hyperplasia: validation of convective thermal energy transfer and characterization with magnetic resonance imaging and 3-dimensional renderings. *Urology*, 2015, 86(1): 122-127. [[Crossref](#)]
2. Bausch K, Zahiti L, Schruttt M, Wetterauer C, Halbeisen FS, Ebbing J, et al. Water vapor thermal therapy of lower urinary tract symptoms due to benign prostatic obstruction: efficacy and safety analysis of a real-world cohort of 211 patients. *World J Urol*, 2023, 41(6): 1605-1612. [[Crossref](#)]
3. Ibrahim KAG, Meshref AEW, El-Rassoul MAA, Bassiony MW, Elsayed AS, & Ibrahim H. Comparison between convective radiofrequency water vapor thermal ablation (Rezūm) versus tamsulosin in management of lower urinary tract symptoms in patients with benign prostatic enlargement. *Uro-Technology Journal*, 2025, 9(4). [[Crossref](#)]
4. Cakiroglu B, Acar İ C, & Uyanık BS. Outcomes of Rezūm water vapor therapy for benign prostate obstruction with 1-year follow-up: largest real-world data from Turkey. *Cent European J Urol*, 2025, 78(2): 144-150. [[Crossref](#)]
5. Darson MF, Alexander EE, Schiffman ZJ, Lewitton M, Light RA, Sutton MA, et al. Procedural techniques and multicenter postmarket experience using minimally invasive convective radiofrequency thermal therapy with Rezūm system for treatment of lower urinary tract symptoms due to benign prostatic hyperplasia. *Res Rep Urol*, 2017, 9: 159-168. [[Crossref](#)]
6. Roehrborn CG, Gange SN, Gittelman MC, Goldberg KA, Patel K, Shore ND, et al. Convective thermal therapy: durable 2-year results of randomized controlled and prospective crossover studies for treatment of lower urinary tract symptoms due to benign prostatic hyperplasia. *J Urol*, 2017, 197(6): 1507-1516. [[Crossref](#)]

**Cite this article as:** Hennery G. Application of the prostate health index in the early diagnosis and treatment of prostate cancer. *Uro-Technology Journal*, 2025, 9(4): 96-97. doi: 10.31491/UTJ.2025.12.047