



## Topic Exploration Report

Topic explorations are designed to provide a high-level briefing on new topics submitted for consideration by Health Technology Wales. This report was prepared by Health Technology Wales on behalf of the Bevan Commission. It summarises the existing evidence on the technology of interest to support a Bevan health technology exemplar application.

Topic:	Introduction of the micro-morcellation device Resectr™ into outpatient hysteroscopy clinics
Topic exploration report number:	TER022
Referrer:	Richard Penketh
Topic exploration undertaken by:	Health Technology Wales

### Aim of Search

Health Technology Wales researchers searched for evidence on the use of Resectr, or use of morcellation devices in general, in any hysteroscopy setting.

### Summary of Findings

NICE Guideline 88 (published March 2018) includes recommendations on investigating causes for, and management of, heavy menstrual bleeding. For women with suspected submucosal fibroids, polyps or endometrial pathology, the guideline recommends that hysteroscopy services are organised to enable progression to 'see-and-treat' hysteroscopy in a single setting, if feasible. Hysteroscopic morcellation is not explicitly mentioned. NICE Interventional Procedures Guidance 522 (published June 2015) provides assessment and recommendations for hysteroscopic morcellation of uterine leiomyomas (fibroids).

There is very limited evidence available for Resectr: we identified one abstract commenting on the first *in vitro* use of Resectr, but further high-quality research is needed. The use of hysteroscopic morcellation in general has been assessed in a number of systematic reviews. These highlight potential clinical advantages of hysteroscopic morcellation when compared with conventional resection. However, data was limited and more high-quality research is needed to fully assess the use of hysteroscopic morcellation.

### Key sources of evidence

- NICE Guideline NG88. Heavy menstrual bleeding: assessment and management: <https://www.nice.org.uk/guidance/ng88>
- Interventional Procedures Guidance (IPG522): Hysteroscopic morcellation of uterine leiomyomas (fibroids): <https://www.nice.org.uk/guidance/ipg522>

- Li C et al. A systematic review and meta-analysis of randomized controlled trials comparing hysteroscopic morcellation with resectoscopy for patients with endometrial lesions. *Int J Gynaecol Obstet.* 2017 Jan;136(1):6-12.
- Shazly SA et al. Hysteroscopic Morcellation Versus Resection for the Treatment of Uterine Cavitary Lesions: A Systematic Review and Meta-analysis. *J Minim Invasive Gynecol.* 2016 Sep-Oct;23(6):867-77.
- Noventa M et al. Intrauterine Morcellator Devices: The Icon of Hysteroscopic Future or Merely a Marketing Image? A Systematic Review Regarding Safety, Efficacy, Advantages, and Contraindications. *Reprod Sci.* 2015 Oct;22(10):1289-96.

### Areas of Uncertainty

Existing evidence on Resectr is very limited. HTW identified two ongoing trials in the Netherlands; estimated completion is 2021 and it is uncertain as to whether interim analyses will be reported. Further high-quality research is needed to assess Resectr, and the range of hysteroscopic morcellators available.

## Brief literature search results

Resource	Results
Guidelines and guidance	
<p><a href="#">NICE</a></p> <p><i>We searched for guidelines, technology appraisals, diagnostics, interventional procedures, and medical technologies guidance.</i></p>	<p>Heavy menstrual bleeding: assessment and management (NG88). March 2018.  <a href="https://www.nice.org.uk/guidance/ng88">https://www.nice.org.uk/guidance/ng88</a></p> <p>Interventional procedures guidance (IPG522): Hysteroscopic morcellation of uterine leiomyomas (fibroids).  <a href="https://www.nice.org.uk/guidance/ipg522">https://www.nice.org.uk/guidance/ipg522</a></p>
<p><a href="#">Healthcare Improvement Scotland:</a></p> <p><i>We searched the HIS website for any relevant advice and hand-searched Scottish Health Technologies Group and Scottish Intercollegiate Guidelines Network publications.</i></p>	<p>We did not identify any guidance on the use of Resectr or hysteroscopic morcellation in general.</p>
<p><a href="#">Guidelines International Network</a></p>	<p>We did not identify any guidance on the use of Resectr or hysteroscopic morcellation in general.</p>
Secondary literature and economic evaluations	
<p><a href="#">ECRI</a></p>	<p>We did not identify any assessments on the use Resectr.</p>
<p><a href="#">Cochrane library</a></p> <p><i>We searched for relevant Cochrane Reviews.</i></p>	<p>We did not identify any assessments on the use Resectr. On the use of hysteroscopic morcellation in general, the following references were identified that may be of interest:</p> <p>Cochrane systematic review. Surgical intervention versus expectant management for endometrial polyps in subfertile women. <a href="https://doi.org/10.1002/14651858.CD009592.pub2">https://doi.org/10.1002/14651858.CD009592.pub2</a></p>
<p><a href="#">Medline</a></p> <p><i>We searched the Medline database for systematic reviews, meta-analyses, economic evaluations only.</i></p>	<p>We did not identify any assessments on the use Resectr. On the use of hysteroscopic morcellation in general, the following references were identified that may be of interest:</p> <p><a href="#">Hysteroscopic Morcellation Versus Resection for the Treatment of Uterine Cavitory Lesions: A Systematic Review and Meta-analysis.</a> Shazly SA; Laughlin-Tommaso SK; Breitkopf DM; Hopkins MR; Burnett TL; Green IC; Farrell AM; Murad MH; Famuyide AO. Journal of Minimally Invasive Gynecology. 23(6):867-77, 2016 Sep-Oct.</p> <p><a href="#">A systematic review and meta-analysis of randomized controlled trials comparing hysteroscopic morcellation with resectoscopy for patients with endometrial lesions.</a> Li C; Dai Z; Gong Y; Xie B; Wang B. International Journal of Gynaecology &amp; Obstetrics. 136(1):6-12, 2017 Jan.</p> <p><a href="#">Intrauterine Morcellator Devices: The Icon of Hysteroscopic Future or Merely a Marketing Image? A Systematic Review Regarding Safety, Efficacy, Advantages, and Contraindications.</a> Noventa M; Ancona E; Quaranta M; Vitagliano A; Cosmi E; D'Antona D; Gizzo S. Reproductive Sciences. 22(10):1289-96, 2015 Oct.</p>
Primary studies	

<p><a href="#">Medline</a></p> <p><i>We searched the Medline database for studies of any design.</i></p>	<p>We did not identify any further primary studies on the use Resectr or the use of hysteroscopic morcellation in general.</p>
<p><a href="#">Cochrane library</a></p> <p><i>We searched the Cochrane Trials database for studies of any design.</i></p>	<p>We did not identify any primary studies on the use Resectr. On the use of hysteroscopic morcellation in general, the following references were identified that may be of interest:</p> <p>Removal of Endometrial Polyps: hysteroscopic Morcellation versus Bipolar Resectoscopy, A Randomized Trial (2015). Hamerlynck TW, Schoot BC, van Vliet HA, Weyers S. <a href="https://doi.org/10.1016/j.jmig.2015.07.006">https://doi.org/10.1016/j.jmig.2015.07.006</a></p> <p>Twelve-Month Outcomes for Patients Undergoing Hysteroscopic Morcellation of Uterine Polyps and Myomas in an Office or Ambulatory Surgical Center (2015). Rubino RJ, Lukes AS. <a href="https://doi.org/10.1016/j.jmig.2014.10.015">https://doi.org/10.1016/j.jmig.2014.10.015</a></p> <p>Hysteroscopic morcellation compared with electrical resection of endometrial polyps: a randomized controlled trial (2014). Smith PP, Middleton LJ, Connor M, Clark TJ. <a href="https://doi.org/10.1097/AOG.000000000000187">https://doi.org/10.1097/AOG.000000000000187</a></p> <p>Hysteroscopic morcellator for removal of intrauterine polyps and myomas: a randomized controlled pilot study among residents in training (2009). van Dongen H, Emanuel MH, Wolterbeek R, Trimpos JB, Jansen FW. <a href="https://doi.org/10.1016/j.jmig.2008.02.002">https://doi.org/10.1016/j.jmig.2008.02.002</a></p> <p>A comparison of morcellation versus electrical resection for endometrial polyps in the ambulatory setting: a randomized controlled trial. Smith PP, Clark J (2013). <a href="https://doi.org/10.1016/j.jmig.2013.08.192">https://doi.org/10.1016/j.jmig.2013.08.192</a> (conference abstract)</p> <p>Integrated bigatti shaver morcellator (IBS) versus standard hysteroscopic resection for endometrial polyps treatment: a prospective comparative study (2015). Stoll F, Schwartz L, Sananes N, Garbin O. <a href="https://doi.org/10.1007/s10397-015-0918-0">https://doi.org/10.1007/s10397-015-0918-0</a> (conference abstract)</p>
<p>Google search</p>	<p>The following article (Open Communications abstract only) was identified:</p> <p>First In Vitro Results of a Manually Controlled Hysteroscopic Tissue Removal System (RESECTR®). 2016. <a href="https://www.jmig.org/article/S1553-4650(16)30411-3/abstract">https://www.jmig.org/article/S1553-4650(16)30411-3/abstract</a></p>
<p>Ongoing research</p>	
<p><a href="#">Clinicaltrials.gov</a></p>	<p>We did not identify any ongoing research for Resectr; however, the following ongoing studies for hysteroscopic morcellation were identified:</p> <p>NCT01537822. The Hysteroscopic Morcellator Versus the Bipolar Resectoscope for Removal of Larger Intrauterine Polyps, Removal of Submucous Myomas and Removal of Residual Placental Tissue: a Randomized Controlled Trial. Estimated study completion date December 2018. <a href="https://clinicaltrials.gov/ct2/show/NCT01537822">https://clinicaltrials.gov/ct2/show/NCT01537822</a></p>

	<p>NCT02934789. Randomized Prospective Study of the Effectiveness of the Truclear Device for Hysteroscopic Myomectomy on Patient Quality of Life. Actual study completion date May 2018. <a href="https://clinicaltrials.gov/ct2/show/NCT02934789">https://clinicaltrials.gov/ct2/show/NCT02934789</a></p> <p>NCT02472197. Morcellator Versus Resectoscope in the Treatment of Uterine Polyps by Hysteroscopy (RESMO). Actual study completion date July 2018. <a href="https://clinicaltrials.gov/ct2/show/nct02472197">https://clinicaltrials.gov/ct2/show/nct02472197</a></p> <p>NCT02406898. Evaluation of a Hysteroscopic Morcellator in Hysteroscopic Treatment of Submucosal Fibroids. Estimated study completion date March 2018. <a href="https://clinicaltrials.gov/ct2/show/nct02406898">https://clinicaltrials.gov/ct2/show/nct02406898</a></p>
Google search	<p>NTR7103. The hand driven hysteroscopic tissue removal system (Resectr® 9.0 fr) versus motor driven hysteroscopic tissue removal system (Truclear) for removal of polyps: a randomized controlled trial. Planned closing date 30 September 2021. <a href="http://www.trialregister.nl/trialreg/admin/rctview.asp?TC=7103">http://www.trialregister.nl/trialreg/admin/rctview.asp?TC=7103</a></p> <p>NTR7118. The hand driven hysteroscopic tissue removal system (Resectr® 9.0 fr) versus motor driven hysteroscopic tissue removal system (Truclear) for removal of polyps: a randomized controlled trial. <a href="http://www.trialregister.nl/trialreg/admin/rctview.asp?TC=7118">http://www.trialregister.nl/trialreg/admin/rctview.asp?TC=7118</a></p>

<b>Date of search:</b>	September 2018
<b>Concepts used:</b>	Resectr, (hysteroscopic) resection, (hysteroscopic) morcellator/morcellation