

## National Institute for Health and Care Excellence

### IP1569/2 Transurethral water-jet ablation for lower urinary tract symptoms caused by benign prostatic hyperplasia

IPAC date: 13<sup>th</sup> July 2023

Com. no.	Consultee name and organisation	Sec. no.	Comments	Response Please respond to all comments
1	Consultee 1 Company Boston Scientific	1.1	<p>We note that the committee has made the recommendation for “standard arrangements” due to their opinion that there is good quality evidence, and the procedure is safe enough. We are concerned that these arrangements do not appear to consider important safety concerns related to the transurethral water-jet ablation procedure, and we believe these concerns warrant greater emphasis in the guidance.</p> <p>We note for example that all three of the professional experts who returned questionnaires said that in their opinion this procedure is both novel and of uncertain safety and efficacy.</p>	<p>Thank you for your comment.</p> <p>The committee discussed this comment but decided not to change the main recommendation.</p>
2	Consultee 1 Company Boston Scientific	1.1	<p>We understand and appreciate the importance and attractiveness of the preservation of sexual function, a factor that may help to increase the demand and use of this procedure. We note however that Sajan et al. in their Systematic Review and Network Meta-Analysis of MITs for BPH concluded that “the benefits of Aquablation are overshadowed by bleeding complications and the relatively high transfusion rates”. (1)</p> <p>We believe that the number of significant safety concerns reported for the transurethral water-jet ablation procedure such as post-operative bleeding requiring blood transfusion, haematuria and bleeding related re-admissions, and rectal perforation warrant greater emphasis in the guidance. (2-6) This</p>	<p>Thank you for your comment.</p> <p>The review by Sajan et al. (2021) is included in table 5 of the overview. It only included studies published up to April 2020, 1 of which was on water-jet ablation.</p> <p>Kaplan-Maran et al. (2022), which includes data from the FDA MAUDE database, is included in table 2 of the overview. This was included because it</p>

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			<p>is further illustrated by the data from the FDA MAUDE database given that 78% (79/102) of events associated with water-jet ablation were described as severe or life-threatening and just 23% (23/102) as mild or moderate. (2) Rectal perforation and blood transfusion rates of 4/102 (4%) and 32/102 (31%) appear to us to be important considerations too.</p> <p>We note that periprocedural and delayed (within 30 days) blood transfusion rates of 5.9% and 4% were reported in the studies reviewed by the committee. (3) Further to this, Toribio-Vázquez et al.'s work highlighting post-operative complications in 202 patients treated for benign prostate hyperplasia (101 AquaBeam® and 101 HoLEP), resulted in 5 patients in the AquaBeam® group and 1 in the HoLEP group requiring blood transfusion (p=0.02), and 5 patients treated with AquaBeam® and 2 with HoLEP requiring reoperation due to haematuria (p=0.03). (4) As you will be aware this study also reported 1 patient in the AquaBeam® group experiencing a rectal perforation and 1 patient death after a pneumonic process. We think Gross et al.'s suggestion, based upon their experience of this technique, that all patients should have a post procedure rectoscopy, is an important recommendation that would warrant discussion by the committee. (7)</p> <p>Elterman et al.'s case series of 801 patients treated with Aquablation therapy reported a transfusion rate of 3.9% and further demonstrated that the risk of transfusions increased significantly as prostate volume increased. (5) This is of particular concern if post-procedural haemostasis techniques to reduce the risk of bleeding are not in place.</p> <p>We have some concerns that the draft guidance does not appear to give sufficient weight to the general consensus in the</p>	<p>describes adverse events that were not captured elsewhere in the published literature. There are limitations to the data included on the FDA MAUDE, which are described in the overview. These include under-reporting, duplicate reporting, incomplete reports and uncertainty if the device caused the complication being described. The true denominator for these events is not captured and the database is not designed to calculate or compare complication rates.</p> <p>Toribio-Vázquez et al. (2023) is a conference poster presentation. It will not be added to table 2 because the key evidence already describes rectal perforation as an adverse event and rates of blood transfusion after the procedure.</p> <p>Gross et al. (2021) is included in table 5 of the overview. It describes 2 cases of rectal perforation, which is already described as a safety outcome in table 2.</p> <p>Elterman et al. (2020) is included in table 2 of the overview.</p>

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			<p>literature that electrosurgical techniques are now being used routinely to prevent bleeding complications. In addition to Elterman et al., Probst et al. also states that use of electro cautery, together with catheter balloon tension applied to the bladder neck and irrigation, has been adopted by nearly all Aquablation surgeons since 2020. (8)</p> <p>Given the apparent importance of post-procedural haemostasis techniques to reduce the risk of bleeding we suggest that the recommendations should include the use of methods to reduce bleeding risks (i.e., additional electrosurgery at the end of the procedure).</p> <p>We feel it is particularly important for new users performing the procedure to be aware of the bleeding risks.</p> <ol style="list-style-type: none"> <li>1. Sajan A, Mehta T, Desai P et al. (2021) Minimally invasive treatments for benign prostatic hyperplasia: systematic review and network metaanalysis. <i>Journal of Vascular and Interventional Radiology</i> 33: 359–367</li> <li>2. Kaplan-Marans E, Martinez M, Wood A et al. (2022) Aquablation, prostatic urethral lift, and transurethral water vapor therapy: a comparison of device related adverse events in a national registry. <i>Journal of Endourology</i> 36: DOI: 10.1089/end.2021.0455</li> <li>3. Zorn K, Bidair M, Trainer A et al. (2021) Aquablation therapy in large prostates (80–150 cc) for lower urinary tract symptoms due to benign prostatic hyperplasia: WATER II 3-year trial results. <i>BJUI Compass</i> 3: 130-8</li> <li>4. Toribio-Vázquez C, Cansino R, Fernández-Pascual E, et al. (2023) MP51-01 COMPARING THE TREATMENT OF PATIENTS WITH AQUABEAM® AND HOLEP FOR BENIGN</li> </ol>	<p>Probst et al. (2022) is included in table 5 of the overview. It is a review describing the management of bleeding complications after water-jet ablation.</p>

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			<p>PROSTATE HYPERPLASIA. The Journal of Urology, 209(Supplement 4), e692.</p> <p>5. Elterman D, Bach T, Rijo E et al. (2020) Transfusion rates after 800 Aquablation procedures using various haemostasis methods. BJU International 125: 568–72</p> <p>6. Gloger S, Schueller L, Paulics L et al. (2021) Aquablation with subsequent selective bipolar cauterization versus holmium laser enucleation of the prostate (HoLEP) with regard to perioperative bleeding. The Canadian Journal of Urology 28: 10685–90</p> <p>7. Gross AJ, Becker B, Vogt K et al. (2021) Rectal perforation after aquablation of the prostate: lessons learned the hard way. World Journal of Urology 39: 3441–46</p> <p>8. Probst P, Desai M (2022) Expectations facing reality: complication management after Aquablation treatment for lower urinary tract symptoms. European Urology Focus 8: 1733– 35</p>	
3	Consultee 1 Company Boston Scientific	2.3	<p>Although the transurethral water-jet ablation procedure does not use heat to ablate the tissue, due to the high rates of post-operative bleeding and transfusion observed in initial trials, as stated above we understand it is now considered standard practice to perform additional electrosurgery (using heat) at the end of the procedure to reduce the risk of bleeding (see section 3.6 of the NICE draft guidance).</p> <p>We feel it is significant that standardised haemostasis techniques were not used in the pivotal trials, which resulted in the need for a blood transfusion in a number of patients (the WATER II study reported a periprocedural blood transfusion rate of 5.9%, and a further 4% delayed transfusion rate within 30 days). (3) In addition, we believe the findings in Elterman’s case series of 801 patients treated with Aquablation therapy that the risk of transfusions increased significantly in larger prostates when cautery is not used is important. (5) The focal bladder</p>	<p>Thank you for your comment.</p> <p><b>Note: comments 3, 4 and 5 are the same although they are addressing different sections of the guidance.</b></p> <p>Section 3.6 of the draft guidance states: ‘The procedure has evolved over time. Additional electrosurgery at the end of the procedure is now commonly used to reduce the risk of bleeding.’</p>

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			<p>neck cautery (FBNC) technique to achieve haemostasis post-transurethral water-jet ablation procedure has since been adopted as standard practice by surgeons performing the procedure. (9)</p> <p>The Aquablation procedure has its own code since 2017 in Germany and we believe that official data published by the German Institute for the Hospital Remuneration System (InEK GmbH) may provide real-world procedural insights currently not available for England. This data shows that in 2021 and 2022 nearly half (43.5%) of ~2000 water-jet ablation procedures were followed by electroresection. (10)</p> <p>If NICE's recommendations are based on the transurethral water-jet ablation procedure plus the additional electrosurgery, rather than on the transurethral water-jet ablation procedure alone then we ask that this use of heat should be acknowledged and the reference to this procedure being heat free removed from the guidance.</p> <p>3. Zorn K, Bidair M, Trainer A et al. (2021) Aquablation therapy in large prostates (80–150 cc) for lower urinary tract symptoms due to benign prostatic hyperplasia: WATER II 3-year trial results. BJUI Compass 3: 130-8</p> <p>5. Elterman D, Bach T, Rijo E et al. (2020) Transfusion rates after 800 Aquablation procedures using various haemostasis methods. BJU International 125: 568–72</p> <p>9. Elterman DS, Foller S, Ubrig B et al. (2021b) Focal bladder neck cautery associated with low rate of post-Aquablation bleeding. The Canadian Journal of Urology 28: 10610–13</p> <p>10. InEK DatenBrowser. Available at: <a href="https://datenbrowser.inek.org/">https://datenbrowser.inek.org/</a></p>	<p>Section 2.3 of the guidance has been changed to remove 'heat free'.</p>

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4	Consultee 1 Company Boston Scientific	2.5	<p>Although the transurethral water-jet ablation procedure does not use heat to ablate the tissue, due to the high rates of post-operative bleeding and transfusion observed in initial trials, as stated above we understand it is now considered standard practice to perform additional electrosurgery (using heat) at the end of the procedure to reduce the risk of bleeding (see section 3.6 of the NICE draft guidance).</p> <p>We feel it is significant that standardised haemostasis techniques were not used in the pivotal trials, which resulted in the need for a blood transfusion in a number of patients (the WATER II study reported a periprocedural blood transfusion rate of 5.9%, and a further 4% delayed transfusion rate within 30 days). (3) In addition, we believe the findings in Elterman’s case series of 801 patients treated with Aquablation therapy that the risk of transfusions increased significantly in larger prostates when cautery is not used is important. (5) The focal bladder neck cautery (FBNC) technique to achieve haemostasis post-transurethral water-jet ablation procedure has since been adopted as standard practice by surgeons performing the procedure. (9)</p> <p>The Aquablation procedure has its own code since 2017 in Germany and we believe that official data published by the German Institute for the Hospital Remuneration System (InEK GmbH) may provide real-world procedural insights currently not available for England. This data shows that in 2021 and 2022 nearly half (43.5%) of ~2000 water-jet ablation procedures were followed by electroresection. (10)</p> <p>If NICE’s recommendations are based on the transurethral water-jet ablation procedure plus the additional electrosurgery, rather than on the transurethral water-jet ablation procedure</p>	<p>Thank you for your comment.</p> <p>Section 3.6 of the draft guidance states: ‘The procedure has evolved over time. Additional electrosurgery at the end of the procedure is now commonly used to reduce the risk of bleeding.’</p> <p>Section 2.3 of the guidance has been changed to remove ‘heat free’.</p>

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			<p>alone then we ask that this use of heat should be acknowledged and the reference to this procedure being heat free removed from the guidance.</p> <p>3. Zorn K, Bidair M, Trainer A et al. (2021) Aquablation therapy in large prostates (80–150 cc) for lower urinary tract symptoms due to benign prostatic hyperplasia: WATER II 3-year trial results. BJUI Compass 3: 130-8</p> <p>5. Elterman D, Bach T, Rijo E et al. (2020) Transfusion rates after 800 Aquablation procedures using various haemostasis methods. BJU International 125: 568–72</p> <p>9. Elterman DS, Foller S, Ubrig B et al. (2021b) Focal bladder neck cautery associated with low rate of post-Aquablation bleeding. The Canadian Journal of Urology 28: 10610–13</p> <p>10. InEK DatenBrowser. Available at: <a href="https://datenbrowser.inek.org/">https://datenbrowser.inek.org/</a></p>	
5	Consultee 1 Company Boston Scientific	Not stated	<p>Although the transurethral water-jet ablation procedure does not use heat to ablate the tissue, due to the high rates of post-operative bleeding and transfusion observed in initial trials, as stated above we understand it is now considered standard practice to perform additional electrosurgery (using heat) at the end of the procedure to reduce the risk of bleeding (see section 3.6 of the NICE draft guidance).</p> <p>We feel it is significant that standardised haemostasis techniques were not used in the pivotal trials, which resulted in the need for a blood transfusion in a number of patients (the WATER II study reported a periprocedural blood transfusion rate of 5.9%, and a further 4% delayed transfusion rate within 30 days). (3) In addition, we believe the findings in Elterman’s case series of 801 patients treated with Aquablation therapy that the risk of transfusions increased significantly in larger prostates</p>	<p>Thank you for your comment.</p> <p>Section 3.6 of the draft guidance states: ‘The procedure has evolved over time. Additional electrosurgery at the end of the procedure is now commonly used to reduce the risk of bleeding.’</p> <p>Section 2.3 of the guidance has been changed to remove ‘heat free’.</p>

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			<p>when cautery is not used is important. (5) The focal bladder neck cautery (FBNC) technique to achieve haemostasis post-transurethral water-jet ablation procedure has since been adopted as standard practice by surgeons performing the procedure. (9)</p> <p>The Aquablation procedure has its own code since 2017 in Germany and we believe that official data published by the German Institute for the Hospital Remuneration System (InEK GmbH) may provide real-world procedural insights currently not available for England. This data shows that in 2021 and 2022 nearly half (43.5%) of ~2000 water-jet ablation procedures were followed by electroresection. (10)</p> <p>If NICE's recommendations are based on the transurethral water-jet ablation procedure plus the additional electrosurgery, rather than on the transurethral water-jet ablation procedure alone then we ask that this use of heat should be acknowledged and the reference to this procedure being heat free removed from the guidance.</p> <p>3. Zorn K, Bidair M, Trainer A et al. (2021) Aquablation therapy in large prostates (80–150 cc) for lower urinary tract symptoms due to benign prostatic hyperplasia: WATER II 3-year trial results. BJU Compass 3: 130-8</p> <p>5. Elterman D, Bach T, Rijo E et al. (2020) Transfusion rates after 800 Aquablation procedures using various haemostasis methods. BJU International 125: 568–72</p> <p>9. Elterman DS, Foller S, Ubrig B et al. (2021b) Focal bladder neck cautery associated with low rate of post-Aquablation bleeding. The Canadian Journal of Urology 28: 10610–13</p> <p>10. InEK DatenBrowser. Available at: <a href="https://datenbrowser.inek.org/">https://datenbrowser.inek.org/</a></p>	



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6	Consultee 1 Company Boston Scientific	2.5	Due to the additional electrosurgery commonly performed at the end of the Aquablation procedure to reduce bleeding risks, it may not be possible to isolate outcomes from the Aquablation procedure with/without the additional electrosurgery.	Thank you for your comment. <b>Note: comments 6 and 7 are the same</b> The outcomes are included as they appear in the published literature.
7	Consultee 1 Company Boston Scientific	Not stated	Due to the additional electrosurgery commonly performed at the end of the Aquablation procedure to reduce bleeding risks, it may not be possible to isolate outcomes from the Aquablation procedure with/without the additional electrosurgery.	Thank you for your comment.  The outcomes are included as they appear in the published literature.
8	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	2.4	We request the removal of the average resection time as this will be dependent on surgical protocol and patient requirements. It also has no bearing on the procedural outcome and clinical outcome.	Thank you for your comment.  <b>Note: comments 8 and 9 are the same</b>  Section 2.4 of the draft guidance has been changed to remove resection time.
9	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Not stated	We request the removal of the average resection time as this will be dependent on surgical protocol and patient requirements. It also has no bearing on the procedural outcome and clinical outcomes.	Thank you for your comment.  Section 2.4 of the draft guidance has been changed to remove resection time.
10	Consultee 1 Company	2.5	We are concerned that it may be misleading to state that the advantages of the procedure include a shorter resection time,	Thank you for your comment.

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	Boston Scientific		<p>as we are not sure this takes into account the total operative time and additional time required to perform the electrosurgery procedure following transurethral water-jet ablation. This additional step, now considered standard practice, adds an average of 12 minutes to the procedure. (11) In the multicentre randomised controlled trial of 181 patients, although resection time was lower for Aquablation (4 vs 27 minutes, <math>p &lt; 0.0001</math>), mean total operative time was similar for transurethral water-jet ablation and transurethral prostate resection (33 vs 36 minutes, respectively (<math>p=0.2752</math>)), without accounting for the additional time required to perform the electrosurgery in the transurethral water-jet ablation procedure. (12)</p> <p>11. Helfand BT, Glaser AP, Kasraeian Ali et al. (2021) Men with lower urinary tract symptoms secondary to BPH undergoing Aquablation with very large prostates (&gt; 150 mL). The Canadian Journal of Urology 28: 10884–88</p> <p>12. Gilling P, Barber N, Bidair M et al. (2018) WATER: A double-blind, randomized, controlled trial of Aquablation vs transurethral resection of the prostate in benign prostatic hyperplasia. The Journal of Urology 199: 1252–61</p>	<p><b>Note: comments 10 and 11 are the same</b></p> <p>Section 2.5 of the draft guidance has been changed to remove resection time.</p>
11	Consultee 1 Company Boston Scientific	General	<p>We are concerned that it may be misleading to state that the advantages of the procedure include a shorter resection time, as we are not sure this takes into account the total operative time and additional time required to perform the electrosurgery procedure following transurethral water-jet ablation. This additional step, now considered standard practice, adds an average of 12 minutes to the procedure. (11) In the multicentre randomised controlled trial of 181 patients, although resection time was lower for Aquablation (4 vs 27 minutes, <math>p &lt; 0.0001</math>), mean total operative time was similar for transurethral water-jet</p>	<p>Thank you for your comment.</p> <p>Section 2.5 of the draft guidance has been changed to remove resection time.</p>

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			<p>ablation and transurethral prostate resection (33 vs 36 minutes, respectively (p=0.2752)), without accounting for the additional time required to perform the electrosurgery in the transurethral water-jet ablation procedure. (12)</p> <p>11. Helfand BT, Glaser AP, Kasraeian Ali et al. (2021) Men with lower urinary tract symptoms secondary to BPH undergoing Aquablation with very large prostates (&gt; 150 mL). The Canadian Journal of Urology 28: 10884–88</p> <p>12. Gilling P, Barber N, Bidair M et al. (2018) WATER: A double-blind, randomized, controlled trial of Aquablation vs transurethral resection of the prostate in benign prostatic hyperplasia. The Journal of Urology 199: 1252–61</p>	
12	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	2.5	Inline with statement 2.4 we request 'shorter respective time compared' is removed as this dependent on many different factors.	Thank you for your comment. Section 2.5 of the draft guidance has been changed to remove resection time.
13	Consultee 1 Company Boston Scientific	3.6	<p>As above, this additional electrosurgery procedure has been adopted as standard practice by surgeons (8,9) and should be reflected in the recommendations and arrangements as such to ensure that the inherent bleeding risks associated with the transurethral water-jet ablation procedure are minimised.</p> <p>8. Probst P, Desai M (2022) Expectations facing reality: complication management after Aquablation treatment for lower urinary tract symptoms. European Urology Focus 8: 1733– 35</p>	Thank you for your comment.  IPG recommendations do not usually specify how a procedure should be done in any detail.

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			9. Elterman DS, Foller S, Ubrig B et al. (2021b) Focal bladder neck cauterly associated with low rate of post-Aquablation bleeding. The Canadian Journal of Urology 28: 10610–13	
14	Consultee 1 Company Boston Scientific	Not stated	<p>We note that the evidence relied upon by the committee included a randomised controlled trial which only included prostate volumes between 30 and 80 ml. In the draft guidance (section 3.5) NICE state that “most of the evidence was from small- to medium-sized prostates”. In the specialist advice questionnaires, the professional experts also remark that there is a lack of long-term data in the treatment of larger volume prostates, with no comparative data vs the standard of care for the &gt; 80 ml prostate. Given that in Elterman’s case series of 801 patients treated with Aquablation therapy the risk of transfusions increased significantly in larger prostates when cauterly is not used, (5) we feel it is important to differentiate the prostate volumes.</p> <p>5. Elterman D, Bach T, Rijo E et al. (2020) Transfusion rates after 800 Aquablation procedures using various haemostasis methods. BJU International 125: 568–72</p>	<p>Thank you for your comment.</p> <p>Although most of the evidence was from small to medium-sized prostates, the prostate volume across all studies ranged from 20 ml to 363 ml. Section 3.5 has been amended to note that there is emerging evidence for larger prostates.</p>
15	Consultee 1 Company Boston Scientific	Unmet need	<p>As far as we are aware, there is no published data reporting transurethral water-jet ablation being performed as a day case procedure. We are not clear on what evidence this statement is based. Published data reports the average length of stay for the transurethral water-jet ablation between 1.4 to 3.9 days with no procedures reported as a day case. (13-16)</p> <p>13. Gilling P, Barber N, Bidair M et al. (2022) Five-year outcomes for Aquablation therapy compared to TURP: results from a double-blind, randomized trial in men with LUTS due to</p>	<p>Thank you for your comment.</p> <p>Two of the professional experts stated that there was potential for the procedure to be done as a day case.</p> <p>The unmet need section has been amended to: This procedure is potentially suitable for all prostate sizes</p>

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			<p>BPH. The Canadian Journal of Urology 29: 10960–68</p> <p>14. Gloger S, Schueller L, Paulics L et al. (2021) Aquablation with subsequent selective bipolar cauterization versus holmium laser enucleation of the prostate (HoLEP) with regard to perioperative bleeding. The Canadian Journal of Urology 28: 10685–90</p> <p>15. Bach T, Gilling P, Hajj A et al. (2020) First multi-center all-comers study for the aquablation procedure. Journal of Clinical Medicine 9: 603</p> <p>16. Desai MM, Singh A, Abhishek S et al. (2018) Aquablation therapy for symptomatic benign prostatic hyperplasia: a single-centre experience in 47 patients. BJU International 121: 945–51</p>	<p>and to be done as a day case procedure.</p>
16	<p>Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)</p>	3.1	<p>We request that the latest publication of WATER II 5-year (Bhojani 2023) results is part of this evidence review to ensure the latest clinical evidence is reviewed at the point of publication.</p> <p>Bhojani et al. Aquablation Therapy in Large Prostates (80-150 mL) for Lower Urinary Tract Symptoms Due to Benign Prostatic Hyperplasia: Final WATER II 5-Year Clinical Trial Results</p>	<p>Thank you for your comment.</p> <p>Bhojani et al (2023) was identified in the updated literature search and has been added to table 2 of the overview.</p>
17	<p>Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)</p>	3.5	<p>We request that this is expanded to 'small to large prostates' in line with the latest published clinical evidence and the prostate sizes of 30-535ml outline in this clinical evidence.</p> <p>Elterman, et al MP51-02 AQUABLATION POSTOPERATIVE BLEEDING RISK REDUCTION</p>	<p>Thank you for your comment.</p> <p>The reference cited is from a conference poster presentation. Conference abstracts are not normally considered adequate to support decisions on efficacy and are not generally selected for presentation in the overview, unless they contain important safety data.</p>

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18	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Not stated	We request that this paragraph referring to the Kaplan-Marans study is removed throughout the document. The authors did not have access to procedure volume for any of the noted procedures; therefore, inaccurate conclusions may be drawn regarding risk profiles. Additionally, there are many factors that influence reporting into the MAUDE database and therefore cannot be a substitute for prospective clinical studies.	Thank you for your comment.  <b>Note: comments 18 and 19 are the same</b>  Kaplan-Maran et al. (2022), which includes data from the FDA MAUDE database, is included in table 2 of the overview. This was included because it describes adverse events that were not captured elsewhere in the published literature. The limitations to the data are described in the overview. These include under-reporting, duplicate reporting, incomplete reports and uncertainty if the device caused the complication being described. The true denominator for these events is not captured and the database is not designed to calculate or compare complication rates.
19	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Not stated	We request that this paragraph referring to the Kaplan-Marans study is removed. The authors did not have access to procedure volume for any of the noted procedures; therefore, inaccurate conclusions may be drawn regarding risk profiles. Additionally, there are many factors that influence reporting into the MAUDE database and therefore cannot be a substitute for prospective clinical studies.	Thank you for your comment.  Kaplan-Maran et al. (2022), which includes data from the FDA MAUDE database, is included in table 2 of the overview. This was included because it describes adverse events that were not captured elsewhere in the published literature. The limitations to the data are

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				described in the overview. These include under-reporting, duplicate reporting, incomplete reports and uncertainty if the device caused the complication being described. The true denominator for these events is not captured and the database is not designed to calculate or compare complication rates.
20	Consultee 2 Company Procept Biorobotics  (manufacturer of device used in this procedure)	Not stated	We request that the latest publication of WATER II 5-year results (Bhojani et al 2023) is part of this evidence review to ensure the latest clinical evidence is reviewed at the point of publication.  Bhojani et al. Aquablation Therapy in Large Prostates (80-150 mL) for Lower Urinary Tract Symptoms Due to Benign Prostatic Hyperplasia: Final WATER II 5-Year Clinical Trial Results	Thank you for your comment.  <b>Note: comments 20 and 21 are the same</b>  Bhojani et al (2023) was identified in the updated literature search and has been added to table 2 of the overview.
21	Consultee 2 Company Procept Biorobotics  (manufacturer of device used in this procedure)	Not stated	We request that the latest publication of WATER II 5-year (Bhojani 2023) results is part of this evidence review to ensure the latest clinical evidence is reviewed at the point of publication.  Bhojani et al. Aquablation Therapy in Large Prostates (80-150 mL) for Lower Urinary Tract Symptoms Due to Benign Prostatic Hyperplasia: Final WATER II 5-Year Clinical Trial Results	Thank you for your comment.  Bhojani et al (2023) was identified in the updated literature search and has been added to table 2 of the overview.
22	Consultee 2 Company Procept Biorobotics	Overview	We request that the mean time on Elterman 2021b in the 'study table' mean time is put in context as one part of the procedure, not the full procedure as this could be misleading.	Thank you for your comment.  The efficacy outcome table for Elterman 2021b states: 'Mean time from removing

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	(manufacturer of device used in this procedure)			Please respond to all comments  handpiece to inserting the urinary catheter was 19.9 minutes.'
23	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Overview	We request to add in a further point to provide a full overview of the RCT data:  <ul style="list-style-type: none"> <li>• The evidence includes a randomised, double-blinded controlled trial, comparing water-jet ablation to TURP with 5 year follow-up.</li> <li>• The evidence includes a single-arm, controlled trial, comparing water-jet ablation to an objective performance criteria based on published TURP data with 5 year follow-up.</li> </ul>	Thank you for your comment.  The overview has been updated to note that more 5-year follow-up data is now available.
24	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Overview	We request to add in a point about the second 5-year data now available with WATER II: <ul style="list-style-type: none"> <li>• The randomised controlled trial included some outcome data to 5 years, which is the longest follow up reported. The authors noted that this was available for a relatively low proportion of men who were enrolled in the study, because the 4 and 5-year follow-up visits coincided with the pandemic caused by COVID-19 (Gilling 2022). A second, prospective trial with higher rates of 5 year follow-up was published.</li> </ul>	Thank you for your comment. The overview has been updated to include 5-year data from WATER II.
25	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Overview	We request to add that it will be UK and Germany into the WATER III trial.	Thank you for your comment. The information on the WATER III trial was taken from the clinicaltrials.gov website, which only lists German sites in the study locations. The overview has been changed to include the UK.



Com. no.	Consultee name and organisation	Sec. no.	Comments	Response Please respond to all comments
26	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Overview	We request this the AUA guidelines updated to the latest reference which is Lerner et al in 2021.	Thank you for your comment.  The overview has been updated to include the reference by Lerner et al. (2021)
27	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Overview	We request the latest guidelines are reviewed and updated from the Canada Drug and Health Technology Agency which includes Aquablation up to larger prostates of 150mL -  <a href="https://cuaj.ca/index.php/journal/article/view/7906/5457">https://cuaj.ca/index.php/journal/article/view/7906/5457</a>	Thank you for your comment.  The overview has been updated with the recommendation from the 2022 guideline published by the Canadian Urological Association.
28	Consultee 2 Company Procept Biorobotics (manufacturer of device used in this procedure)	Overview	We request that the last bullet point statement is removed as we have 5 year data in two prospective trials and enrolling a third trial against enucleation.  • Long-term evidence (beyond 2 and 6 years) on all 4 treatments is still lacking. Head-to-head comparative trials of these newer treatments are also needed.'	Thank you for your comment.  The overview has been updated with a recommendation from a more recent guideline published by the Canadian Urological Association, so this bullet point has been deleted.

*"Comments received in the course of consultations carried out by NICE are published in the interests of openness and transparency, and to promote understanding of how recommendations are developed. The comments are published as a record of the submissions that NICE has received, and are not endorsed by NICE, its officers or advisory committees."*