Appendix 2. Processes and criteria for post-vasectomy semen analysis recommended by the Association of Surgeons in Primary Care (ASPC) of the United Kingdom.*

Number of tests	Recommendation	Semen sample submission strategies	
		Non-Postal [†]	Postal [‡]
	Clearance	No sperm or less than 10,000 non-motile sperm/mL observed on two consecutive PVSA.§	No sperm observed on two consecutive PVSA.§
2-Test	Repeat test	Any motile sperm or more than 10,000 non-motile sperm/mL observed before 7 months post vasectomy.	Any motile or non-motile sperm observed before 7 months post vasectomy.
Based on 2004 RCOG ¹ / 2002 BAS ² guidelines	Failure	Failure: Any motile sperm observed after 7 months post vasectomy. Possible failure: More than 10,000 nonmotile sperm/mL observed after 7 months post vasectomy.	Failure: Any motile sperm observed after 7 months post vasectomy. Possible failure: Any concentration of nonmotile sperm >7 months post vasectomy. At this point, the patient should submit nonpostal sample(s).
	Clearance	No sperm or less than 100,000 non-motile sperm/mL observed in PVSA.§	No sperm observed in PVSA.§
1-Test Based on 2014	Repeat test	Any motile sperm or more than 100,000 non-motile sperm/mL observed before 7 months post vasectomy.	Any motile or non-motile sperm observed before 7 months post vasectomy.
FSRH ³ / 2016 ABA,BAS and BAUS ⁴ guidelines	Failure	Failure: Any motile sperm observed after 7 months post vasectomy. Possible failure: More than 100,000 nonmotile sperm/mL observed after 7 months post vasectomy.	Failure: Any motile sperm observed after 7 months post-vasectomy. Possible failure: Any concentration of nonmotile sperm >7 months post vasectomy. At this point, the patient should submit nonpostal sample(s).

*These recommendations and criteria are primarily based on the 2004 Royal College of Obstetricians and Gynaecologists (RCOG)¹ and 2014 Faculty of Sexual & Reproductive Healthcare (FSRH)² Guidelines. The ASPC also took into account some recommendations of the 2002 British Andrology Society (BAS)³ and the 2016 Association of Biomedical Andrologists (ABA), BAS, and British Association of Urological Surgeons (BAUS)⁴ guidelines.

[†] A fresh sample delivered direct to the laboratory (following set instructions usually requiring booking of an appointment) and examined within 1 or 2 hours of ejaculation according to local laboratory protocol.

[‡]This is a sample taken at home, following set instructions, and sent to a laboratory in specially packaging via the Royal Mail.

§ The 2004 RCOG guideline recommends that PVSA may commence any time beyond 8 weeks whilst the 2014 guidelines suggests 12 weeks. Most surgeons advise submission of PVSA samples between 12-16 weeks.

If more than the recommended number of non-motile sperm/mL are present at 7 months, a decision should be reached with the patient to determine the future course of action. This may be to re-operate or continue other contraception with or without further PVSA. This shared decision may be informed by frequency of ejaculation and any trend in numbers of sperm seen.

References

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- 3. Hancock P, McLaughlin E. British Andrology Society guidelines for the assessment of post vasectomy semen samples (2002). *J Clin Pathol* 2002;55(11):812-6. doi: 10.1136/jcp.55.11.812 [published Online First: 2002/10/29]
- 4. Hancock P, Woodward BJ, Muneer A, et al. 2016 Laboratory guidelines for postvasectomy semen analysis: Association of Biomedical Andrologists, the British Andrology Society and the British Association of Urological Surgeons. *J Clin Pathol* 2016;69(7):655-60. doi: 10.1136/jclinpath-2016-203731 [published Online First: 2016/04/17]