What is a Transrectal ultrasound scan (TRUS) and biopsy?
Transrectal ultrasound allows detailed examination of the prostate gland and small biopsies (samples) to be taken. The biopsies are sent to the laboratory to look for benign changes (not cancer), inflammation or prostate cancer.

What are the benefits of this test?
To diagnose or exclude the presence of prostate cancer.

Where is the prostate gland?
The prostate gland lies just below the bladder and in front of the rectum (back passage). The urethra (water pipe) leaves the bladder, passes down through the middle of the prostate to the tip of the penis (see diagram below).

Reproduced with kind permission of Health Press Ltd, Oxford
What does the prostate gland do?
It is a reproductive organ. Its main function is to produce a fluid, which nourishes the sperm and helps make the semen more fluid after ejaculation.

When and where will the TRUS and biopsy be done?
These tests are done at the Royal Gwent Hospital in the Urology Outpatient Department. You will be given 1-2 weeks notice of the appointment time. If the appointment is not convenient, please inform us as soon as possible and we will re-arrange your appointment. Please telephone the Urology department on:- 01633 – 2344831.

Caution: You are advised that skilled tasks e.g. driving may be impaired by the antibiotics you will be given before your biopsy, you should therefore arrange for someone to drive you to and from your appointment.

Do I need to do anything before the test?
If you are taking any anticoagulants/antiplatlets (medicines which thin the blood) such as warfarin, aspirin, clopidogrel (Plavix), dipyridamole or anti-inflammatory tablets such as brufen or voltarol, **you need to contact us as soon as possible on:- 01633 - 2344974** to discuss stopping this medication before your biopsy. You can eat and drink as normal.

IMPORTANT
If you are a hospital worker, farmer or have had previous sepsis following biopsy you will need to have a rectal swab to identify any possible infection as you are more at risk of further infection after the prostrate biopsy. Please phone Janet Marty, Urology Nurse Specialist on:- 01633 – 656143 to discuss this.

What will happen to me when I come for my biopsy?
You will be asked to come about 15 minutes before your appointment so that we can ask you some questions about your general health. You will be given antibiotic tablets to take before your biopsy, this will help reduce the risk of infection. The doctor will ask you to sign a consent form to say that you agree to go ahead with the test.
Will it hurt?
Most people describe the procedure as uncomfortable rather than painful. You will be given local anaesthetic into the prostate, which should help reduce this discomfort. If you still find it very uncomfortable you may be given some Entonox (gas and air). If you still find it very uncomfortable please let the doctor know.

How is the test done?
You will be asked to lower your trousers and underpants before lying on your side with your knees drawn up to your chin. A nurse will be there with you during the procedure. The doctor will insert an ultrasound probe into your rectum (see diagram), this allows the doctor to look at your prostate gland. S/he will then take some pictures and measurements of your prostate. 10 biopsies are usually taken using a fine needle. The procedure takes about 15 minutes.

What happens after the test?
You will be asked to stay for about half an hour to recover from the test. You will need to give us a urine sample afterwards so that we can check how blood stained you urine is. You will be given some antibiotics to take home with you and information about what to expect in the days after the test. It is very important you complete the course of antibiotics in order to reduce your risk of getting an infection.

What are the risks?

Common
Blood in the urine and motions for 1-2 weeks and semen 1-2 months after biopsy.
Occasional  Slight discomfort for a few hours after the biopsy – taking paracetamol (as long as you have never been advised to avoid this medication) will normally relieve this. You should avoid painkillers that thin the blood, such as aspirin and brufen, for 24-48 hrs until the blood in your urine clears. Formation of blood clots in the bladder. Difficulty passing urine requiring admission and urinary catheterisation. Urinary tract infection requiring antibiotics.

Rare  Severe infection.

If any of the above do not settle down, you get flu like symptoms and/or a high temperature within the first 24-48 hours, then please contact Surgical Assessment Unit urgently 01633 656384, you may need to be admitted to hospital for antibiotic treatment.

When will I get the results?
It normally takes at least 2-3 weeks to get the results, longer if special tests are needed on the prostate tissue. You will be sent an appointment to see a doctor in the outpatient department who will discuss the results with you. If you do not hear anything within 4 weeks of your biopsy, please call 01633 234990.

Are there any alternatives to this test?
The alternative is a transperineal biopsy (through the skin between the scrotum and rectum) but this is unavailable at present on the NHS in Wales.

If you have any questions or concerns, please find below contact numbers for the Urology wards and Urology nurses:-

Urology Wards

Surgical Assessment Unit
Tel. No:- 01633 656384

Urology Day Ward on:-
Tel. No:- 01633 – 656378 / 656377
Monday – Friday office hours
Urology Outpatients Department on:-
Tel. No:- 01633 – 234979
Monday – Friday office hours

Janet Marty, Urology Nurse Specialist on:-
Tel. No:- 01633 – 656143
Monday – Friday office hours

Maureen Hunter, Urology Nurse Practitioner on:-
Tel. No:- 01633 – 234758
Monday – Friday office hours

Julie Simpson, Uro-oncology Specialist Nurse on:-
Tel. No:- 01633 – 238976

Stef Young, Pre-admission Nurse Practitioner on:-
Tel. No:- 01633 – 234533
Monday – Friday office hours

References:
British Association of Urological Surgeons (2004) Procedure Specific Consent Forms for Urological Surgery
Tanagho E A McAninch J W 2003 Smiths General Urology