The leaflet tells you about having an intravenous pyelogram (IVP)/urogram (IVU). It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you for the test or the department which is going to perform it.

1. **What is an intravenous pyelogram (IVP) or intravenous urogram (IVU)?**
   With an injection of a special dye (called contrast medium), the kidneys show up better than on an ordinary plain X-ray. There is greater detail of their internal structure. It is also possible to assess roughly how well each kidney is working.

2. **Why are there two names for this test?**
   The test used to be called an intravenous pyelogram. Intravenous means the injection is given into a vein. Pyelogram refers to the images produced of the internal structure of the kidneys, the collecting systems, and the tubes leading from the kidneys to the bladder, the ureters. With newer techniques, it is possible to get better detail of the whole of the kidney, and the name was changed to urogram. However, both names and both abbreviations are still used.

3. **Are there any risks?**
   There are the usual slight risks associated with ionising radiation, and also from the injection of contrast medium. In particular, female patients who are or might be pregnant must inform a member of staff in advance.
   All X-ray procedures involve exposure to radiation in varying amounts. In all X-ray examinations, the amount of radiation is kept to the minimum necessary. However, during the IVP/IVU, you will be exposed to the same amount of radiation as you would receive from the atmosphere over a period of about 14 months.
   The injection you have for this test is generally very safe. Many people have this injection in X-ray departments every day. However, with every injection of the contrast medium, there is a slight risk of a reaction. It is not uncommon for people to feel a little bit warm as the contrast medium flows around the body. Some people may develop a rash, and a few people may get a mild asthma attack.
   The doctor and radiographer in the X-ray department are trained to recognise these reactions and to treat them. Also, should it be necessary, other doctors are close at hand. If you have a history of severe reactions to drugs, or have a severe allergy, you may be advised to have a short course of steroid tablets, or an injection, to reduce the risk of a reaction.
   All risks are relative, and it is important to remember that the risk of missing a serious problem by not having the test done is much greater.

4. **Are you required to make any special preparations?**
   Different radiology departments have slightly different arrangements for carrying out this examination. You may be asked not to drink for a few hours beforehand. You may be given a laxative. Please follow the specific instructions you have been given. If you have any questions, get in touch with the radiology department. Please also tell the radiology department if you have had a similar examination recently.

5. **If you are diabetic**
   If you are receiving treatment for diabetes, please inform the radiology department in advance so that you can be given special instructions about what you should do before and after the IVP/IVU.
6. If you are pregnant
   It is essential that any woman who is pregnant, or might be pregnant, notifies the radiology
department in advance. You might not be able to have this examination and some other
procedure might have to be carried out instead.

7. Can you bring a relative/friend?
   Yes, but for reasons of safety, they may not be able to accompany you into the examination
room, except in very special circumstances.

8. When you arrive
   You should go to the reception desk in the department, after which you will be shown where
to wait until collected by a radiographer or other member of staff.

9. Who will you see?
   You will see a radiographer and perhaps an assistant. A radiologist or another doctor may
give you the injection, or this may be done by a radiographer.

10. What happens during the investigation?
    Before you are taken into the X-ray room, you will be asked to visit the toilet and empty your
    bladder. You will then be taken into the X-ray room and asked to lie on the table. An ordinary
    X-ray of your abdomen will be taken to start with. The radiographer may ask you about any
    allergies or asthma, or whether you have had this test done before. After this, you will have
    the injection of special dye (contrast medium) into your arm near your elbow. You will then
    have further X-rays taken of your abdomen. Most X-rays will be taken with you lying flat on
    your back, but you may be asked to lie on your stomach. On some occasions, you may have a tight band placed across your abdomen to improve the
detail of your kidneys.
    Before the end of the examination, you may be asked to go to the toilet and empty your
    bladder again.

11. Will it be uncomfortable?
    Having the injection is rather like having your blood taken. The needle may hurt briefly while
    it goes through the skin, but after that you should not feel any pain. While the needle is being
    inserted, a tourniquet (tight band) may be used to compress your arm.

12. How long will it take?
    Unless you are delayed by having to wait, such as for emergency patients, your total time in
    the department should be at least an hour.

13. Are there any side-effects?
    Not usually.

14. Can you eat and drink afterwards?
    Yes.

15. When will you get the results?
    The scan will be examined after your visit and a written report on the findings sent to your
    referring doctor which is normally available in 2 days.

Finally
Some of your questions should have been answered by this leaflet, but remember that this is only a
starting point for discussion about your treatment with the doctors looking after you. Make sure you
are satisfied that you have received enough information about the procedure.