Calcium-channel blockers (CCBs for short) are medicines that are often used to treat high blood pressure. There are a few different types of CCB and each works in a slightly different way. Most of these medicines will have names that end in “ipine”. May 2009

How do they work?
Your body will sometimes use calcium to narrow your blood vessels and this can raise your blood pressure. CCBs lower your blood pressure by blocking the effects of calcium on your blood vessels. This helps your blood vessel walls relax and widen, making it easier for blood to flow through.

Who might be given CCBs?
Most people who have high blood pressure will need to take one or more medicines to control it. CCBs are a popular first-choice medicine for high blood pressure.

They are particularly recommended for people who are over 55 or who are of African Caribbean origin. However, even if neither of these apply to you, you may be given a CCB as a first choice. If you need to take more than one medicine to control your blood pressure enough, you may be given a CCB as a second or third medicine.

CCBs can be an effective treatment for people who have more severely raised blood pressure. If you have high blood pressure and are pregnant or breastfeeding you could also be given a CCB.

One calcium-channel blocker called verapamil has the added effect of slowing your heart rate. You may be given this medicine if you have angina or an irregular heart beat in addition to high blood pressure.

Who would not be given CCBs?
Rarely, CCBs can interfere with other health problems you may have, or with medicines you are taking. Your doctor should always consider

Related Information sheets
- ACE inhibitors
- Angiotensin receptor blockers (ARBs)
- Diuretics

About this information sheet
This information sheet was produced by the Information & Support team at the Blood Pressure Association. It is intended for people who have high blood pressure, or who are interested in high blood pressure. For more about how we make our information, go to www.bpassoc.org.uk/AboutUs
Inform ation Sheet #0 4
M edicines for high blood pressure
Calcium-channel blockers (CCBs) May 2009

Do they have side-effects?
Most people will have no side-effects from their blood pressure medicines. They usually only happen when you start to take a new medicine, or a higher dose of your medicine. If you do experience a side-effect it may lessen over time as your body gets used to the medicine. If not, your doctor may change your dosage or your medicine if they feel it is appropriate.

Other things to be aware of
If you are taking a CCB you should not drink grapefruit juice. This is because it increases the amount of medicine that enters your bloodstream. As a result, your blood pressure can drop very suddenly, which can be dangerous. Apart from amlodipine and diltiazem, almost all CCBs will be affected by grapefruit juice. As far as we are

Possible side-effects of calcium-channel blockers include:

• swollen ankles
• ankle or foot pain
• constipation
• skin rashes.
• a flushed face
• headaches.
• dizziness or tiredness
• swollen or bleeding gums (rarely)
• some men may feel the need to urinate more during the night.

Information Sheet #04
Medicines for high blood pressure
Calcium-channel blockers (CCBs) May 2009

Do they have side-effects?
Most people will have no side-effects from their blood pressure medicines. They usually only happen when you start to take a new medicine, or a higher dose of your medicine. If you do experience a side-effect it may lessen over time as your body gets used to the medicine. If not, your doctor may change your dosage or your medicine if they feel it is appropriate.

Other things to be aware of
If you are taking a CCB you should not drink grapefruit juice. This is because it increases the amount of medicine that enters your bloodstream. As a result, your blood pressure can drop very suddenly, which can be dangerous. Apart from amlodipine and diltiazem, almost all CCBs will be affected by grapefruit juice. As far as we are

Possible side-effects of calcium-channel blockers include:

• swollen ankles
• ankle or foot pain
• constipation
• skin rashes.
• a flushed face
• headaches.
• dizziness or tiredness
• swollen or bleeding gums (rarely)
• some men may feel the need to urinate more during the night.

Calcium-channel blockers used in the UK

<table>
<thead>
<tr>
<th>Medicine name</th>
<th>Brand names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amlodipine</td>
<td>Amlostine, Exforge, Istin</td>
</tr>
<tr>
<td>Diltiazem</td>
<td>Adizen-SR, Adizem-XL, Diltiazem, Dilzem SR, Dilzem XL, Slozem, Tildiem, Tildiem LA, Tildiem Retard, Viazem XL</td>
</tr>
<tr>
<td>Felodipine</td>
<td>Felotens XL, Plendil, Triapin, Triapin Mite, Vascalpha</td>
</tr>
<tr>
<td>Isradipine</td>
<td>Prescal</td>
</tr>
<tr>
<td>Lacidipine</td>
<td>Motens</td>
</tr>
<tr>
<td>Lercanidipine</td>
<td>Zanidip</td>
</tr>
<tr>
<td>Nicardipine</td>
<td>Cardene</td>
</tr>
<tr>
<td>Nifedipine</td>
<td>Nifedipine Adalat, Adalat LA, Adalat Retard, Beta-Adalat, Coracten SR, Coracten XL, Nifedipress, Tenif, Tensipine</td>
</tr>
<tr>
<td>Nisoldipine</td>
<td>Syscor</td>
</tr>
<tr>
<td>Verapamil</td>
<td>Securon SR, Tarka, Univer, Verapamil, Verapress</td>
</tr>
</tbody>
</table>

your overall health and treatment, not just blood pressure treatment, before giving you any new medicine.

Some people who are given a CCB will need to be monitored closely. These include pregnant and breastfeeding women, people with kidney or liver problems and those with heart failure, heart damage or abnormal heart rhythms.

For more information, please contact:
The Blood Pressure Association
Address: 60 Cranmer Terrace, London SW17 0QS
Info Line: 0845 241 0989 (11am - 3pm Mon to Fri)
Website: www.bpassoc.org.uk

The Blood Pressure Association is a Charity registered in England and Wales. Registered Charity No. 1058944 Company Limited by Guarantee registered in England and Wales. Company No. 03251531. Registered Office at: 60 Cranmer Terrace, London SW17 0QS
Inform ation Sheet #0 4
Medicines for high blood pressure
Calcium-channel blockers (CCBs)  May 2009

aware, the juice from oranges and other fruits is considered safe.

Check with your doctor or pharmacist before taking any other medicines in combination with your CCB – this includes over-the-counter treatments.

As with other blood pressure lowering medicines, once you start taking a CCB, be prepared to stay on it for the long term. Some people stop taking their blood pressure medicines when they think their blood pressure is under control, but doing this can put your health at risk.

If you have angina and stop taking your CCB suddenly you could experience chest pain.

If you have any concerns about your medicines, speak to your doctor or pharmacist.