## 2012 Comparison of blood glucose monitoring devices

<table>
<thead>
<tr>
<th>System</th>
<th>CareSens II</th>
<th>CareSens N</th>
<th>CareSens N POP</th>
<th>Accu-Chek Performa*</th>
<th>FreeStyle Optium</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
<td><img src="image4" alt="Image" /></td>
<td><img src="image5" alt="Image" /></td>
</tr>
</tbody>
</table>

### Meter subsidy
- **CareSens II**
  - Fully subsidised from 1 September 2012
- **CareSens N**
  - Subsidised until 30 November 2012
- **CareSens N POP**
  - Subsidised until 30 November 2012
- **Accu-Chek Performa***
  - Continued subsidy for ketone testing only from 1 December 2012
- **FreeStyle Optium**
  - Subsidised until 30 November 2012

### Supplier (Manufacturer)
- **CareSens II**
  - Pharmaco (i-Sens Corp)
- **CareSens N**
  - Roche Diagnostics
- **CareSens N POP**
  - Medica Limited (Abbott Diabetes Care)
- **Accu-Chek Performa***
  - Roche Diagnostics
- **FreeStyle Optium**
  - Medica Limited (Abbott Diabetes Care)

### Test strip type
- **CareSens II**
  - CareSens
- **CareSens N**
  - CareSens N
- **CareSens N POP**
  - CareSens N
- **Accu-Chek Performa***
  - Accu-Chek Performa advanced chemistry
- **FreeStyle Optium**
  - FreeStyle Optium

### Calibration
- **CareSens II**
  - Manual input
- **CareSens N**
  - No-calibration required
- **CareSens N POP**
  - No-calibration required
- **Accu-Chek Performa***
  - Automatic via code chip
- **FreeStyle Optium**
  - No-calibration required

### Test strip subsidy
- **CareSens II**
  - Fully subsidised beyond 1 March 2013
- **CareSens N**
  - Subsidised from 1 March 2013 for patients using an Accu-Chek Combo insulin pump before 1 June 2012
- **CareSens N POP**
  - Subsidised from 1 March 2013 for patients using the meter for testing both blood ketones and blood glucose before 1 June 2012
- **Accu-Chek Performa***
  - Subsidised from 1 March 2013 for patients using an Accu-Chek Combo insulin pump before 1 June 2012
- **FreeStyle Optium**
  - Subsidised from 1 March 2013 for patients using the meter for testing both blood ketones and blood glucose before 1 June 2012

### Insufficient Sample
- **CareSens II**
  - Error message
- **CareSens N**
  - Error message
- **CareSens N POP**
  - Will not start
- **Accu-Chek Performa***
  - Error message
- **FreeStyle Optium**
  - Error message

### Sample type
- **CareSens II**
  - Capillary
- **CareSens N**
  - Capillary, Venous, Neonatal, Arterial
- **CareSens N POP**
  - Capillary
- **Accu-Chek Performa***
  - Capillary
- **FreeStyle Optium**
  - Capillary

### Strip Expiry detection
- **CareSens II**
  - None
- **CareSens N**
  - No-calibration required
- **CareSens N POP**
  - No-calibration required
- **Accu-Chek Performa***
  - Automatic via code chip
- **FreeStyle Optium**
  - No-calibration required

### Ketone Testing
- **CareSens II**
  - ✔
- **CareSens N**
  - ✔
- **CareSens N POP**
  - ✔
- **Accu-Chek Performa***
  - ✔
- **FreeStyle Optium**
  - ✔

### Meter memory
- **CareSens II**
  - 250 tests
- **CareSens N**
  - 250 tests
- **CareSens N POP**
  - 500 tests
- **Accu-Chek Performa***
  - 500 tests
- **FreeStyle Optium**
  - 450 tests

### Day Average
- **CareSens II**
  - 14 days
- **CareSens N**
  - 14 days
- **CareSens N POP**
  - 1, 7, 14, 30, 90 Day Average
- **Accu-Chek Performa***
  - 7, 14, 30 Day Average
- **FreeStyle Optium**
  - 7, 14, 30 Day Average

### Back lighting
- **CareSens II**
  - ✗
- **CareSens N**
  - ✗
- **CareSens N POP**
  - ✗
- **Accu-Chek Performa***
  - ✗
- **FreeStyle Optium**
  - ✗

### Measurement range
- **CareSens II**
  - 1.1-33.3 mmol/L
- **CareSens N**
  - 0.6-33.3 mmol/L
- **CareSens N POP**
  - 1.1-27.8 mmol/L
- **Accu-Chek Performa***
  - 8.0 - 44.0 mmol/L
- **FreeStyle Optium**
  - 10.0 - 50.0 mmol/L

### Operation Temperature
- **CareSens II**
  - 10º - 40º C
- **CareSens N**
  - 8º - 44º C
- **CareSens N POP**
  - 10º - 50º C
- **Accu-Chek Performa***
  - Indicator for low battery
- **FreeStyle Optium**
  - Indicator for low battery

### Battery Error Signal
- **CareSens II**
  - Error message and indicator for low battery
- **CareSens N**
  - Error message and indicator for low battery
- **CareSens N POP**
  - Error message and indicator for low battery
- **Accu-Chek Performa***
  - Indicator for low battery
- **FreeStyle Optium**
  - Indicator for low battery

### Software
- **CareSens II**
  - PC Care
- **CareSens N**
  - AC SmartPix, AC 360, AC Compass, AC Pocket Compass
- **CareSens N POP**
  - CoPilot
- **Accu-Chek Performa***
  - CoPilot
- **FreeStyle Optium**
  - CoPilot

### Website
- **CareSens II**
  - www.caresens.co.nz
- **CareSens N**
  - www.accu-chek.co.nz
- **CareSens N POP**
  - www.medica.co.nz
- **Accu-Chek Performa***
  - www.accurating.com
- **FreeStyle Optium**
  - www.medica.co.nz

### Customer Support
- **CareSens II**
  - Health Care Professionals: 0508 CARESENS - 0508 22 73 73
  - Patients: 0800 GLUCOSE- 0800 45 82 67
- **CareSens N**
  - Health Care Professionals: 0508 CARESENS - 0508 22 73 73
  - Patients: 0800 GLUCOSE- 0800 45 82 67
- **CareSens N POP**
  - Health Care Professionals: 0508 CARESENS - 0508 22 73 73
  - Patients: 0800 GLUCOSE- 0800 45 82 67
- **Accu-Chek Performa***
  - HCP: 0800 22 22 14
  - Patients: 0800 106 100
- **FreeStyle Optium**
  - HCP: 0800 22 22 14
  - Patients: 0800 106 100
## 2012 Comparison of blood glucose monitoring devices

<table>
<thead>
<tr>
<th>System</th>
<th>FreeStyle Lite</th>
<th>On Call Advanced</th>
<th>CareSens POP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meter subsidy</strong></td>
<td>Subsidised until 30 November 2012</td>
<td>Subsidised until 30 November 2012</td>
<td>Subsidised until 30 September 2012</td>
</tr>
<tr>
<td><strong>Supplier (Manufacturer)</strong></td>
<td>Medica Limited (Abbott Diabetes Care)</td>
<td>Airflow Products (Acon Laboratories)</td>
<td>Pharmaco (i-Sens Corp)</td>
</tr>
<tr>
<td><strong>Test strip type</strong></td>
<td>FreeStyle Lite</td>
<td>On Call Advanced</td>
<td>CareSens</td>
</tr>
<tr>
<td><strong>Calibration</strong></td>
<td>No-calibration required</td>
<td>Automatic via code chip</td>
<td>Manual input</td>
</tr>
<tr>
<td><strong>Test strip subsidy</strong></td>
<td>Subsidised until 28 February 2013</td>
<td>Subsidised until 28 February 2013</td>
<td>Fully subsidised beyond 1 March 2013</td>
</tr>
<tr>
<td><strong>Insufficient Sample</strong></td>
<td>Will not start</td>
<td>Error message</td>
<td>Error message</td>
</tr>
<tr>
<td><strong>Sample type</strong></td>
<td>Capillary, Venous</td>
<td>Capillary, Venous, Neonatal, Arterial</td>
<td>Capillary</td>
</tr>
<tr>
<td><strong>Strip Expiry detection</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Ketone Testing</strong></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Meter memory</strong></td>
<td>400 tests</td>
<td>300 tests</td>
<td>10 tests</td>
</tr>
<tr>
<td><strong>Day Average</strong></td>
<td>7, 14, 30 Day Average</td>
<td>7, 14, 30, 60, 90 Day Average</td>
<td>No</td>
</tr>
<tr>
<td><strong>Back lighting</strong></td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Measurement range</strong></td>
<td>1.1-27.8 mmol/L</td>
<td>0.6-33.3 mmol/l</td>
<td>1.1-33.3 mmol/L</td>
</tr>
<tr>
<td><strong>Operation Temperature</strong></td>
<td>4º - 40º C</td>
<td>5º - 45º C</td>
<td>10º - 40º C</td>
</tr>
<tr>
<td><strong>Battery Error Signal</strong></td>
<td>Indicator for low battery</td>
<td>Error message and indicator for low battery</td>
<td>“LO” flashes on the screen</td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>CoPilot</td>
<td>Diabetes Monitoring Software Kit</td>
<td>None</td>
</tr>
<tr>
<td><strong>Website</strong></td>
<td><a href="http://www.medica.co.nz">www.medica.co.nz</a></td>
<td><a href="http://www.air-flow.co.nz">www.air-flow.co.nz</a></td>
<td><a href="http://www.caresens.co.nz">www.caresens.co.nz</a></td>
</tr>
<tr>
<td><strong>Customer Support</strong></td>
<td>0800 106 100</td>
<td>0800 AIRFLOW (0800 247356)</td>
<td>HCP: 0508 CARESENS - 0508 22 73 73 Patients: 0800 GLUCOSE- 0800 45 82 67</td>
</tr>
</tbody>
</table>

Note: All test strips are free from icodextrin interference except for On Call Advanced.

All meters are calibrated to be plasma equivalent and have a test time of 5 seconds. All meters provide an operation temperature error signal.

In addition to the blood glucose monitoring devices, PHARMAC subsidises the SensoCard brand of blood glucose test strips only if prescribed for a patient who is severely visually impaired and is using a SensoCard Plus Talking Blood Glucose Monitor.

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