Complete Blood Count (CBC) tests
- Screen for a variety of disorders
- Monitor a medical condition
- Monitor a medical treatment

- More than 500,000 patients with blood diseases, like blood cancer, anemia, sickle cell disease etc. need constant monitoring of blood cells to identify relapse and disease progression
- These tests are expensive and time consuming

**Solution**

The Absolute Blood Cell Monitor analyzes and gives Complete Blood Counts (CBC) from blood samples at home in 15 minutes.

- Portable
- Affordable
- Instant Results
- 3 Part, Easy to Use Design

**Design Specifications**

Specialized microglass slides:
- Cavity between two slides with openings on two ends
- Blood rise determined by Young Laplace Capillary Rise Equation
- Collects a minimum of 1 μL volume of blood

Clip on Microscope:
- Designed at RMIT University and University of Adelaide
- Glass bead in a 3D printed clip forms a tube lens with phone camera lens
- Resolution high enough to image 1 μm – 8 μm cells

Analyzer app:
- Counts cells of each type from images taken by camera
- AI is used to compare shapes and sizes of the cells
- Grid sticker on slide is used to count the number of cells in a specific volume of blood
- Compares cell counts to medically referenced range of values
- In case of abnormality, alerts the patient and prompts them to contact their physician

**Market and Competition**

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<tr>
<td>Complete Blood Count</td>
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<tr>
<td>Direct Communication</td>
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<tr>
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<td>Covered by Insurance</td>
<td>Y</td>
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**Financial Estimation After 8 Years**

| Development Cost            | $6,000,000 |
| Capital Cost                | $300,000   |
| Business Cost               | $68,000,000|
| Operating Cost              | $14,000,000|
| Sales Revenue               | $278,000,000|
| Net Income                  | $189,000,000|

**References**