A.D.A.M.

Point-of-Care Medical Device Production System for Bone Implants

Pitch Deck
October 2022
### Implant 3D-Printing: Background

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>First 3D-printed organ successfully implanted</td>
</tr>
<tr>
<td>2010</td>
<td>FDA approves first 3D-printed orthopaedic implant</td>
</tr>
<tr>
<td>2021</td>
<td>First implant 3D-printed and implanted at same facility</td>
</tr>
<tr>
<td>2022</td>
<td>First POC implant manufacturing lab established in the US</td>
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</table>

**Why is the adoption of POC implant manufacturing lagging despite the obvious benefits?**
Setting up the Point-Of-Care custom implant manufacturing process at the hospital is costly (>$1M), time-consuming (>2 yrs), and burdensome.
Solution

Turnkey system that can be set up within 3 months, cut costs by >50%, increase profit/surgery, and generate additional revenues for hospital

- QMS Certification
- Clear Reimbursement
- Revenue Share Model

A.D.A.M.

On-site implant 3D-printing
Why Now

Market is growing, ready to adopt POC printing, yet not competitive

- Hospitals have started adopting POC manufacturing after COVID-19
- **Market is not saturated** - only ONE hospital in the US has a POC lab for implants
- **FDA is tailoring the regulatory framework** for POC Medical Device Production Systems to the market’s needs
- **Target market is projected to grow**
  - **Global Orthopaedic Implants Market** - USD 47.8B in 2021, USD 72.1B by 2030 at **4.67% CAGR**
  - Total Addressable Market initially ~ 10%, (4.7B), with portfolio expansion - 30-50%
Product: A.D.A.M. System

A.D.A.M. will offer hospitals its bone implant 3D-printing service for a monthly fee

3D Printers
Proprietary BJP and FDM

Digital Platform
Medical data cloud storage, 3D-modelling, ordering

Materials
Bioceramic and biopolymer composites

QMS
Seamless end-to-end workflow
Cloud manufacturing of tissues with a possibility for implant portfolio expansion

How A.D.A.M. Works

CT/MRI Scan

Order Intake

3D Model

Approval / Change Request

Implant Production

Surgery

Hospital

A.D.A.M.

watch video here
A.D.A.M.’s competitors offer either implants, hardware, or software. The only competitor with a POC facility does not offer bioactive materials.

<table>
<thead>
<tr>
<th>Biodegradable materials</th>
<th>Ossiform</th>
<th>formlabs</th>
<th>LITHOZ</th>
<th>TRS</th>
<th>A.D.A.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Bioreposable materials</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Proprietary hardware</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Proprietary software</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>POC printing capability</td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Target Market</td>
<td>Australia</td>
<td>US, EU</td>
<td>EU</td>
<td>EU</td>
<td>US</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EU, US (located in EU)</td>
<td>EU</td>
<td>US, EU, Asia, LatAm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>US</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>US, EU, Ukraine</td>
</tr>
</tbody>
</table>
## Competitive Advantages

A.D.A.M. can deliver a more holistic and efficient solution to the hospitals than its competitors to improve patients’ outcomes.

<table>
<thead>
<tr>
<th>Lower costs</th>
<th>Shorter production time</th>
<th>Superior properties of materials</th>
<th>Scalability of the business model</th>
<th>Turnkey solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D office in Ukraine</td>
<td>proprietary printing technology</td>
<td>compared to the predicates</td>
<td>faster entry into further implant markets</td>
<td>all implant 3D-printing services covered</td>
</tr>
</tbody>
</table>
Traction/Milestones

With less than $1M and in less than 3 years, A.D.A.M. has reached the following milestones:

- Digital Platform MVP
- 2 Advanced Materials MVP for 2 printing systems
- 510(k) eligibility confirmed by FDA
- Animal studies protocol (Charles River)
- Implants tested (Yale, UConn)
- 3 hospital partnerships
- 3 PCT patents, 1 provisional in the US, 2 in UA
- Strategic partnership with MOH of Ukraine

2020 2021 2021
2020 2021 2021
2020 2021 2021
2020 2022 2022
Partnerships

A.D.A.M. has already secured partnerships with one of the largest hospital groups in the US, an Ivy League university and the MOH in Ukraine

- R&D and Clinical Translation
- Business development with the ultimate goal of POC facility set-up

2–4 POC facilities in Ukraine over 2 years to treat the wounded
Go-To-Market

Existing partnerships will allow to bring the existing service to the market and grow the product offering.

- **2022**: Securing partnerships with orthopaedic centers of excellence
- **2023**: Completing pilots for point-of-care printing model
- **2023-2024**: Building the distribution and insurance network

Existing partnerships will allow to bring the existing service to the market and grow the product offering.
## Business Model

A.D.A.M. will charge subscribing hospitals a system installation fee and a monthly fee thereafter.

<table>
<thead>
<tr>
<th>Subscription Type</th>
<th>≤ 30 Implants</th>
<th>≤ 50 Implants</th>
<th>≤ 100 Implants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Fee</td>
<td>$280,000</td>
<td>$320,000</td>
<td>$510,000</td>
</tr>
<tr>
<td>Monthly Fee</td>
<td>$90,000</td>
<td>$140,000</td>
<td>$240,000</td>
</tr>
<tr>
<td></td>
<td>$3,000/implant</td>
<td>$2,800/implant</td>
<td>$2,400/implant</td>
</tr>
</tbody>
</table>

To replicate, the hospital would need to pay at least $300k above A.D.A.M.’s costs for Certification alone.

VS market’s $3,000 – $20,000 average price for PEEK PSI.
A.D.A.M. projects $2.7M in revenues in the U.S. in the first year after commercialization and >30% gross profit margin for POC model

<table>
<thead>
<tr>
<th></th>
<th>YR 1</th>
<th>YR 2</th>
<th>YR 3</th>
<th>YR 4</th>
<th>YR 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Clinics</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Revenue</td>
<td>$2,670,000</td>
<td>$7,630,000</td>
<td>$13,740,000</td>
<td>$24,720,000</td>
<td>$36,000,000</td>
</tr>
<tr>
<td>COS</td>
<td>$1,810,554</td>
<td>$5,161,891</td>
<td>$9,283,218</td>
<td>$16,708,911</td>
<td>$24,317,407</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$859,446</td>
<td>$2,468,109</td>
<td>$4,456,782</td>
<td>$8,011,089</td>
<td>$11,682,593</td>
</tr>
</tbody>
</table>

Additional revenues to be generated from:
- implant delivery
- licensing in
- other markets (EU, Ukraine)
Next Product Lines

Cartilage  Ligaments  Heart Valves  Bronchial  Major Blood Vessels
Fundraising

A.D.A.M. is raising $8M at $25 pre-money valuation to achieve product readiness and regulatory clearance for the market entry.

- **$1.2M** Product Development
- **$1.5M** Clinical & Regulatory
- **$0.2M** Marketing
- **$2.1M** Operational Expenses

Completion of animal studies for bioceramic and biopolymer bone implants

2 material composites and 2 printers ready for market launch

FDA 510(k) Clearance

Global IP Coverage Secured

Digital Platform Ready for Commercial Use
Team

Our team has a unique blend of skills in medical, technical and regulatory fields, necessary to bring A.D.A.M. to market

Denys Gurak
CEO
Formerly a top executive of industrial conglomerates; expert in global medical trials regulations

Mykhaylo Pluzhnik
CTO
Engineer focusing on thermal processing, materials chemistry, project management

Carlton Savory, MD
Chief Medical Officer
The first Command Surgeon of the Joint Special Operations Command, former Assistant Chief of Orthopaedics at Walter Reed

Svitlana Kost, PhD
Head of Quality Assurance
Experience in developing Quality Assurance Systems for Pharma and Medical Devices

Oleg Rogankov, PhD
R&D - Production Tech Engineer
Materials physics scientist and technological processes expert

Vadym Volkov, MD
R&D - Medical
Assistant Professor of General Surgery in Odesa, Ukraine; practicing surgeon
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Former U.S. Ambassador to the Netherlands, served in the U.S. Congress incl. as a Chairman of House Committee on Intelligence. Formerly an executive at a Fortune 500 corp

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Global strategic communications, corporate and crisis, public affairs and political advisor.

Tamir Harosh
Business Development Advisor
Professional advisor, leads the BD, negotiations, and consulting teams for companies and individuals

Den Burykin
Digital Strategy Advisor
Experienced entrepreneur with executive and board positions in ICT and technology driven organizations

Eugene Fedorchenko
Digital Strategy Advisor
Strategic business advisor with over decade of track record in management, law and go-to-market domains
Contact

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dgurak@adambioprinting.com

Visit our website:
www.adambioprinting.com
## Appendix 1. Risks

### R&D Office in Odesa: War in Ukraine
- Team relocation to Lviv; relocation options to US/Canada/Netherlands
- All know-how secured on cloud – proprietary hardware and materials can be recreated within 1-2 months & ~$100k

### Pre-Revenue: Failure to Fundraise
- 1st commercial project in Ukraine - revenue generation in Ukraine, enough for R&D and operational support

### FDA Clearance Required for Market Entry in US
- 510(k) eligibility confirmed by FDA - only animal studies required
- Completed biomechanical testing - results indicate A.D.A.M. better than predicates
Appendix 2. Case: Hospital System in Lviv

Hospital Need:
- 10 bioresorbable implants, 10 PEKK implants, 10 surgical meshes, 20 surgical models

A.D.A.M.’s offer:
- Installation of A.D.A.M. system (with additional capabilities to print PEKK) for $200k
- Monthly fee of $60k for up to 30 printed implants