

Skin Spray Gun

Spray-on burn wound
for rapid healing

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Burn wound becoming more common

Infection is major reason of death and disabilities

According to WHO,
More than
10,00,000
Burn injured each year



7 out of **10**
deaths in burn victims
are due to infection

Lack of skin increases the risk of burn wound infection

Grafting is Painful, Expensive and Time Consuming

Inadequate Options for Burn Patients



Major Shortcomings



Large donor area required



Pain during and post procedure



Extended hospitalization and costs



Multiple times surgery



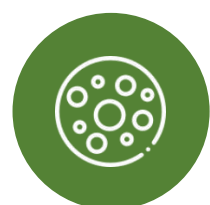
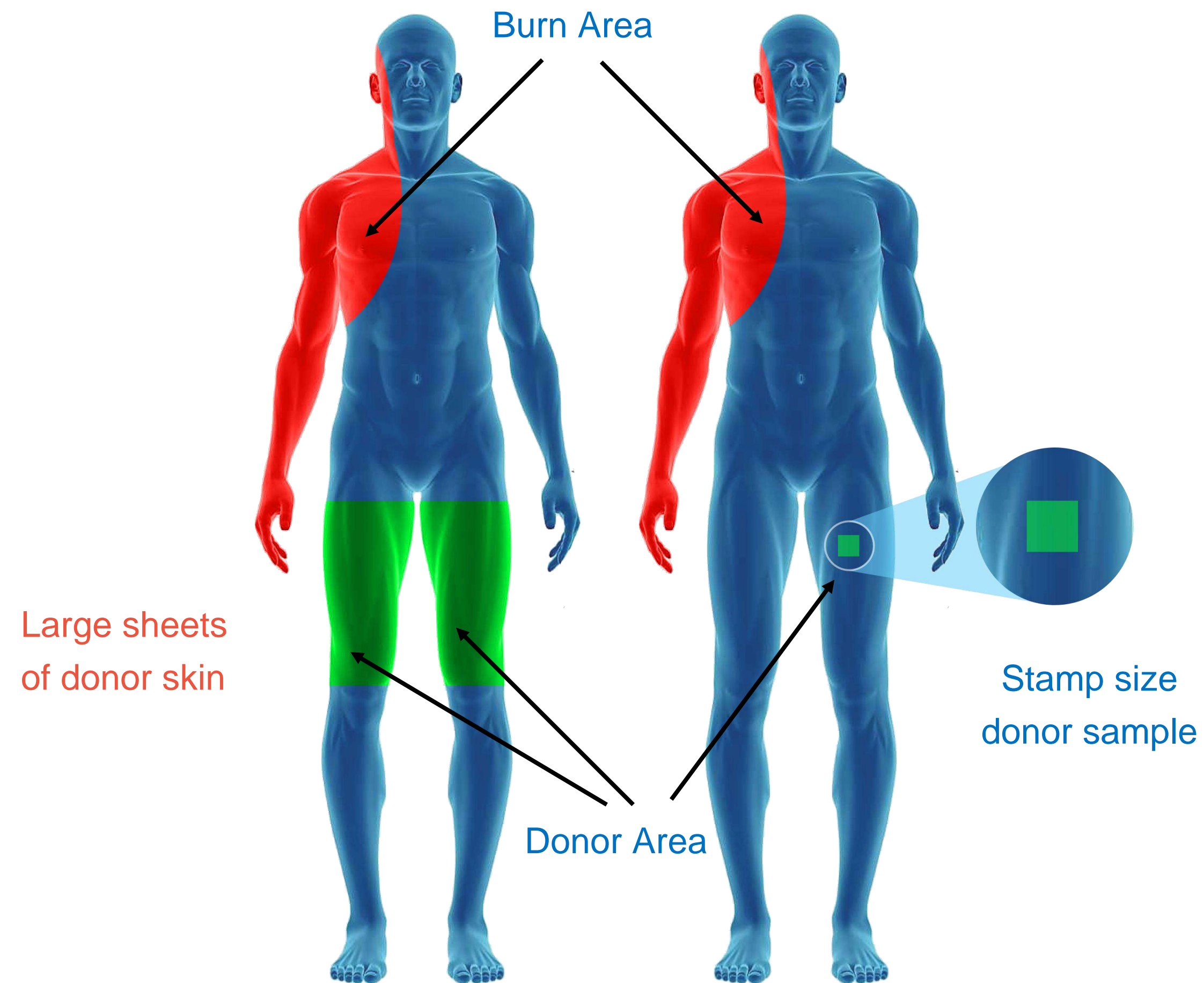
Risk of infection.

Our Solution

The Skin
Spraying Device

**Skin
Grafting**

**Skin
Spraying**



Stamp-sized donor skin



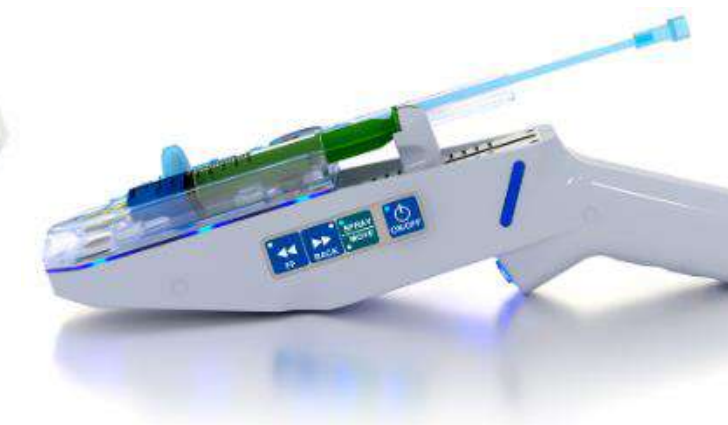
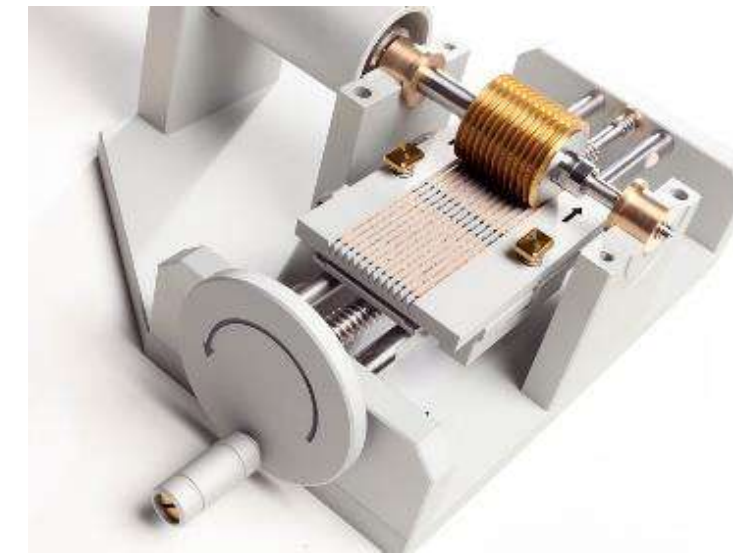
Natural skin growth



Reduces hospitalisation cost

Comparison

Advantages over
the competition



Feature	Mesh grafting devices	Skin cell spray device	Proposed skin spray gun
Procedure time	> 2 hour	1.5 hour	< 20 Min
Burn Area (Total body surface area TBSA)	< 50%	> 50%	> 50%
Expansion ratio	1:9	1:60	1:30
Skill required	Medium	High	Low
Healing time	40 days	20 days	30 days
Selling Price	> ₹ 3 lac	> ₹10 lac	< ₹ 50 k

Addressable burn market

Number of burn patient

700,000

Burn Patients
Treated Annually
in the India



400,000

In-patient
Burn Treatments



75%

In-patient
Burns are Treated
in Burn Centers



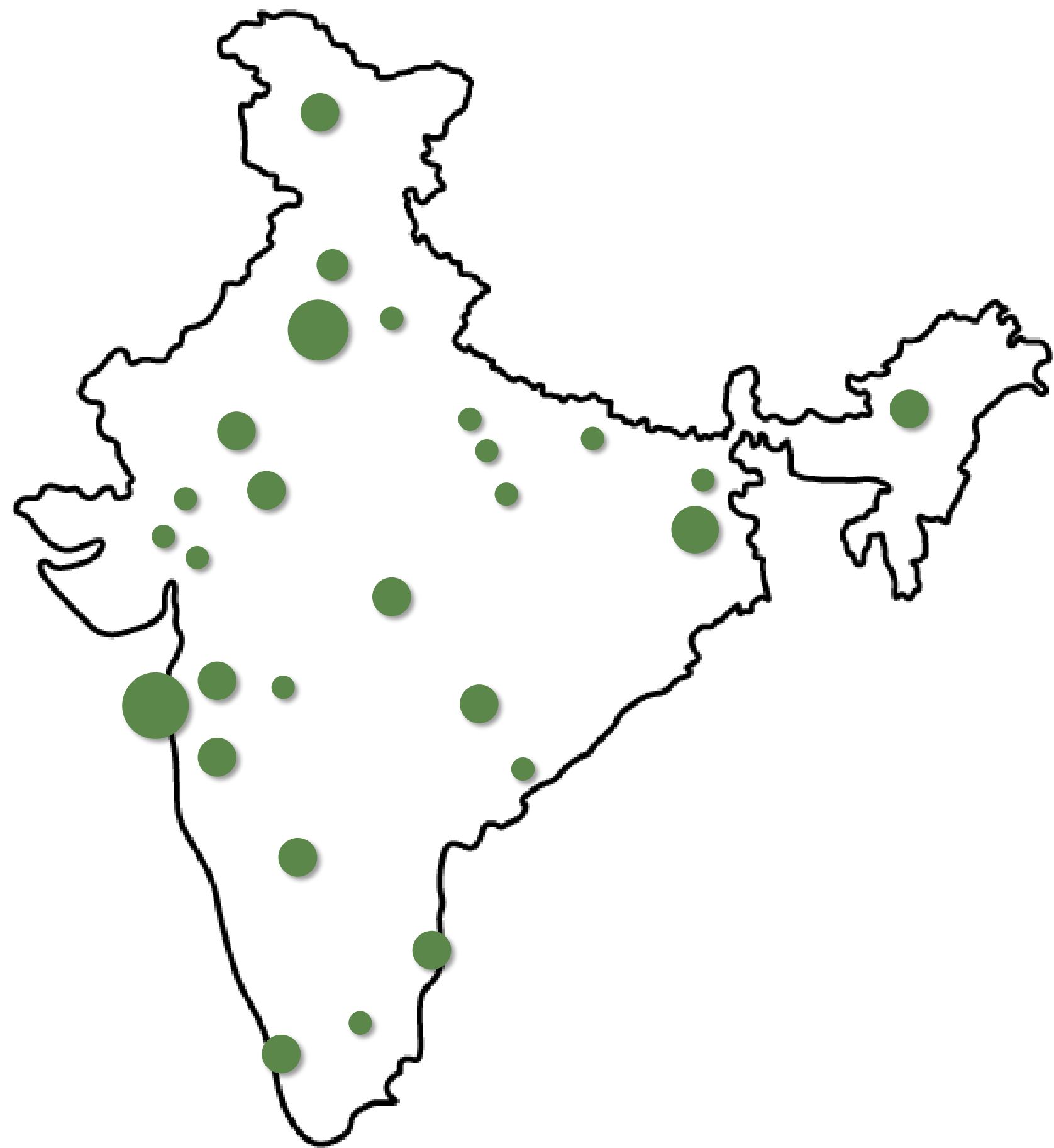
150,000

10%+ TBSA
In-Patients at
Burn Centers are
Target Candidate



India Burn Market is Highly Concentrated

Making It Easily Accessible



80

Burn centers
in the India



10

Burn centers
already contacted



Team & Advisors

The brain behind the idea



Saiprasad (CEO)
M.Des IIITDM (3+ yrs)
Biomedical



Anmol (CTO)
M.Tech IITB
Manufacturing



Rayyan
B.Tech
Mechanical



Dr. Nikhil Panse
BJMC, Pune (20+ yrs)
Plastic Surgeon



Dr. Karoon Agrawal
Safdarjung, Delhi (30+ yrs)
Burn Surgeon



Dr. Vinita Puri
KEM, Mumbai (25+ yrs)
Burn Surgeon

Medical Advisors

Technical Advisors



Prof. B. Ravi
IIT Bombay (30+ yrs)
Expertise: Product Innovation



Prof. B.B. Ahuja
COE Pune (30+ yrs)
Manufacturing



Dr. Sandip Anasane
COE Pune (15+ yrs)
Product Engineering



Dr. Rupesh Ghyar
IIT Bombay (10+ yrs)
Regulatory, Testing



Dr. Arativ V Mulay
COE Pune (10+ yrs)
Rapid Prototyping

Current Status

Patent Pending Device and BIRAC BIG Grant Winner

Prototype	IP	Fund/Award	Surgeons
Functional prototype is ready.	International Patent: PCT/IN2019/050250 dated: 28/03/2019	₹ 50 lakh BIG grant from BIRAC for prototype development.	Interviewed 20+ plastic surgeons from Mumbai, Delhi, Pune, Bangalore, Ahmedabad, Sangli, Kolhapur
Animal trial are in progress.	Indian Patent: 201821011504 dated: 28/03/2019	Top 10 researcher under DST-AIT program from India to Switzerland	

Animal Trial



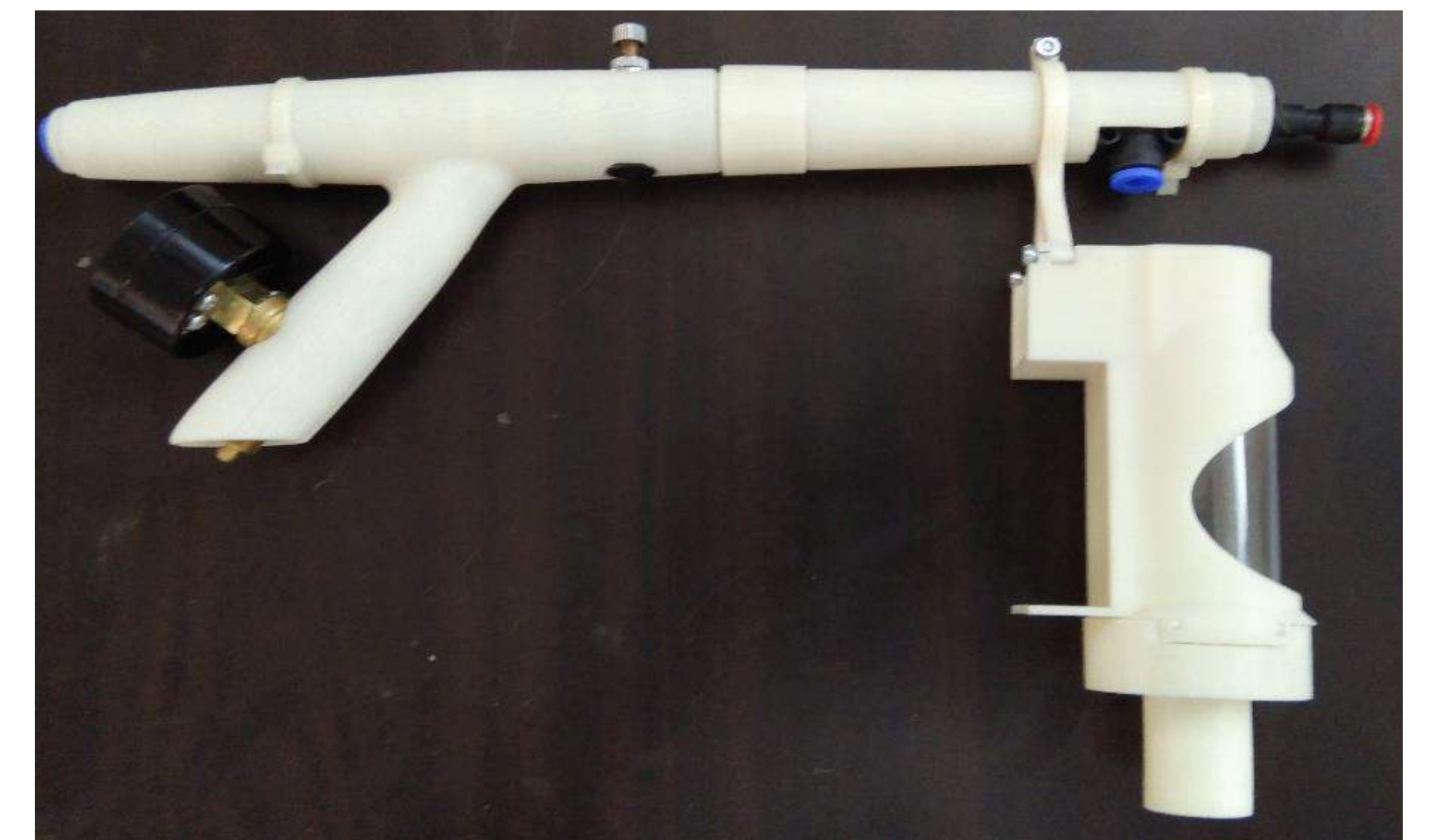
Wound created on Rat



Skin spray



Day 7



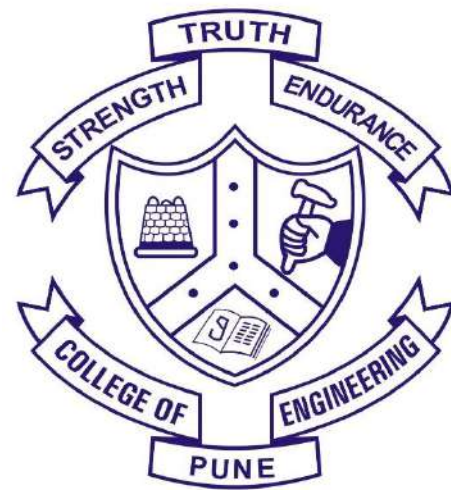
Functional Prototype

Partner

Supporting us



Technology Support



Incubation Support



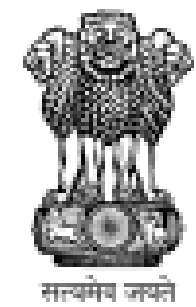
Market Entry Support



Clinical Study Support



Financial Support



DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology



Market Research Support



GDC
Innovate for Impact

Thank you

For your attention

Support us to improve the life of burn patients.

Contact us:

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Appendix

Literature Review



Treatment day

Skin spray

Day 9

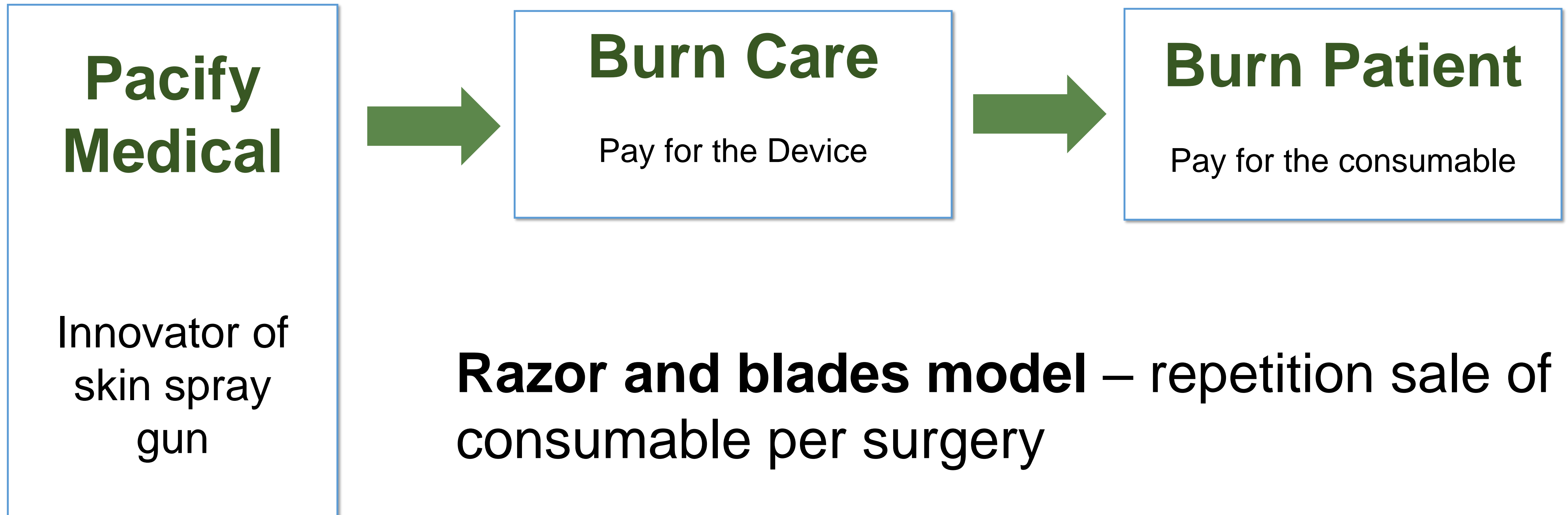
Day 21

Day 100

Ref: Microskin grafting in the treatment of extensive burns A preliminary Report,
Zhang Ming-Liang et al, The journal of Trauma, Vol. 28 No.6, 1998

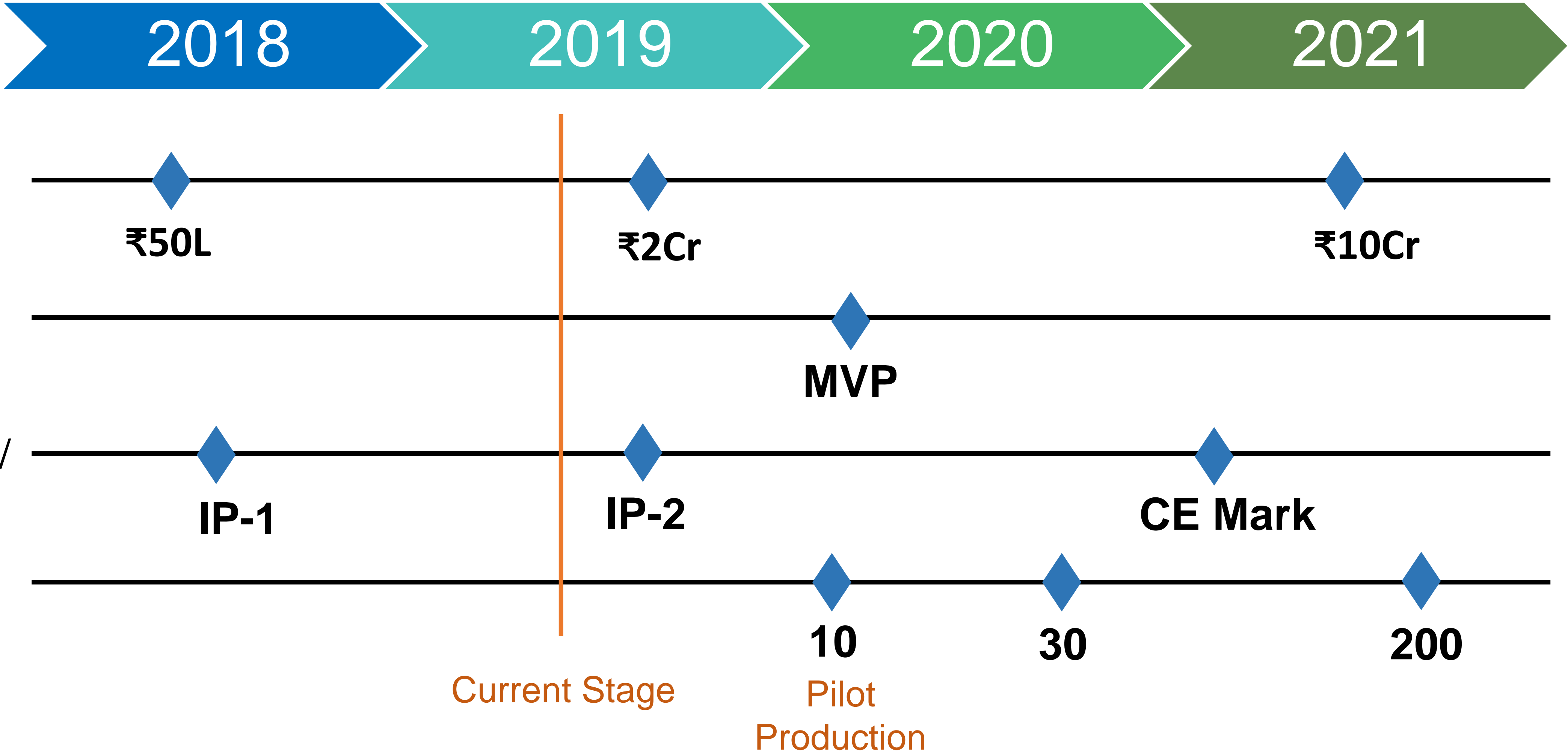
Business Model

Who buys what?



Roadmap

Way forward



Use of Fund

Accelerate the
Clinical Trial

Description	Funds
Pilot Manufacturing	20%
R&D	10%
Manpower	20%
Clinical Trial	30%
Operational Cost	10%
Marketing Cost	5%
Contingency	5%