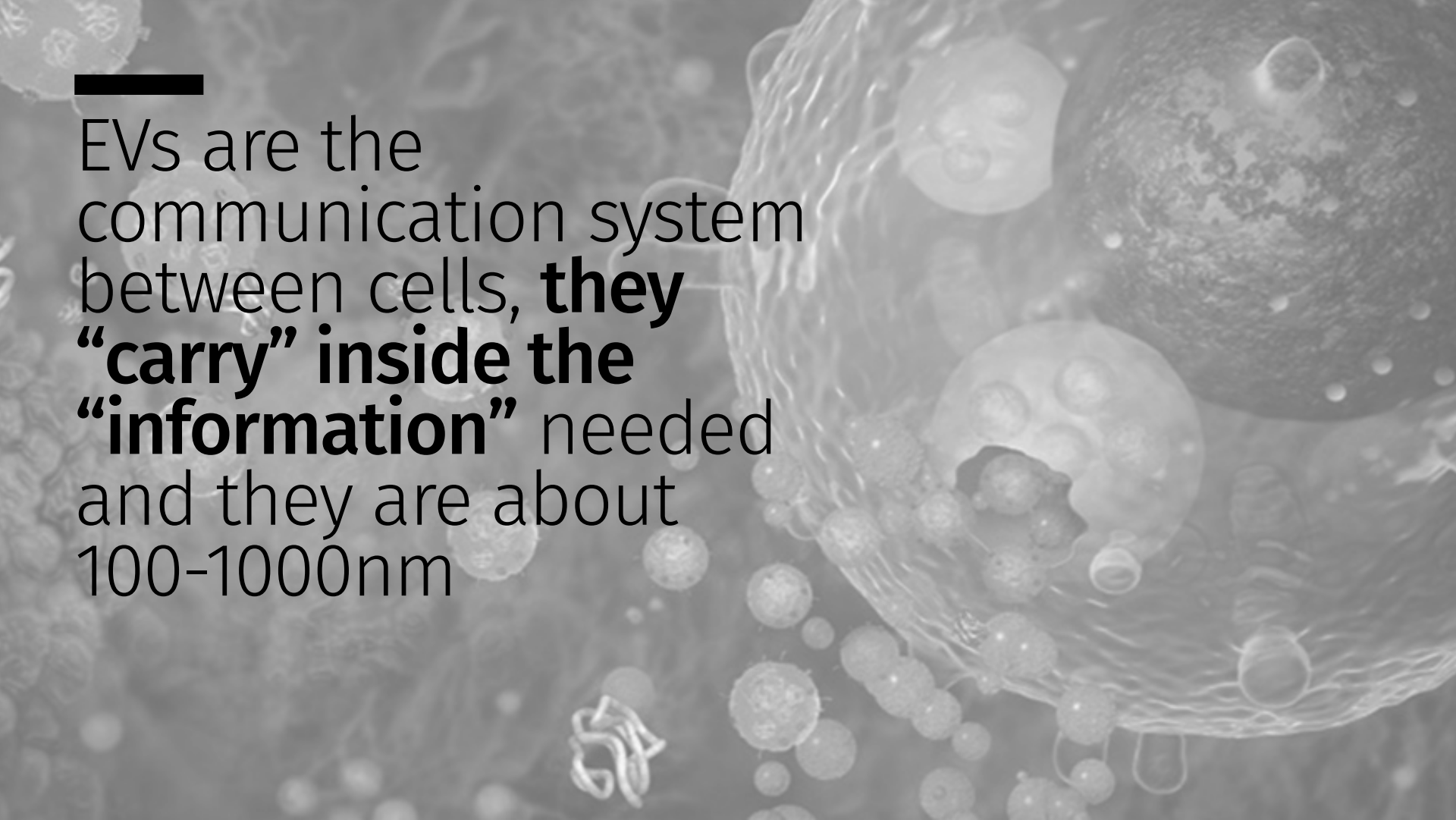


The background of the slide is a teal color with a microscopic view of extracellular vesicles. Several spherical vesicles of varying sizes are visible, some in sharp focus and others blurred in the background. The vesicles have a textured, granular surface. A solid black horizontal bar is positioned above the text 'VES4US'.

VES4US

Extracellular vesicles
from a natural source
for tailor-made nanomaterials



EVs are the
communication system
between cells, **they**
“carry” inside the
“information” needed
and they are about
100-1000nm

Customer pains

- Few Raw Materials
- Technology to extract EVs is far from industrial scale
- Poor quality
- High cost

Solution

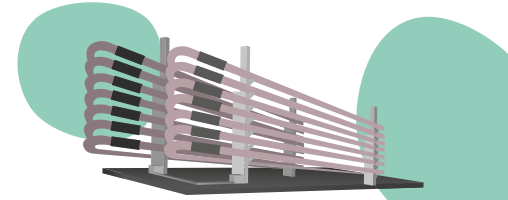
Natural,
Renewable and
Cheaper product
Industrial Scale
solution

FROM A NATURAL SOURCE...

Phase 1:

EVs PRODUCTION:

Selection of the natural source and optimization of culture condition at pre-industrial scale.



Phase 2:

ISOLATION AND CHARACTERIZATION:

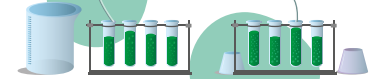
Isolation and physiochemical characterization of the extracellular vesicles.



Phase 3:

FUNCTIONALIZATION AND LOAD:

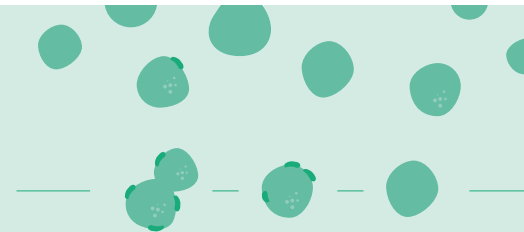
Functionalization and load of the EVs selected from the previous phase. These vesicles may differ according to the different sector needs.



Phase 4:

BIOLOGICAL ACTIVITY:

Biological activity of the EVs explored both in vitro and in vivo



TO A COMMERCIAL PRODUCT

Value Proposition

Make

100x

larger batches
of EVs

Reduce the
production
cost by

10
times

Reduce the
production
Q&C cost by

5
times

Increase the

quality

purity and size
for tailoring
EVs for

industry

Sectors

Biomedicine

Nutraceuticals

Cosmetics

Market

Global exosomes market is around 3M dollars in 2016*

FORECAST: 2.28 billion dollars in 2030*

1000x

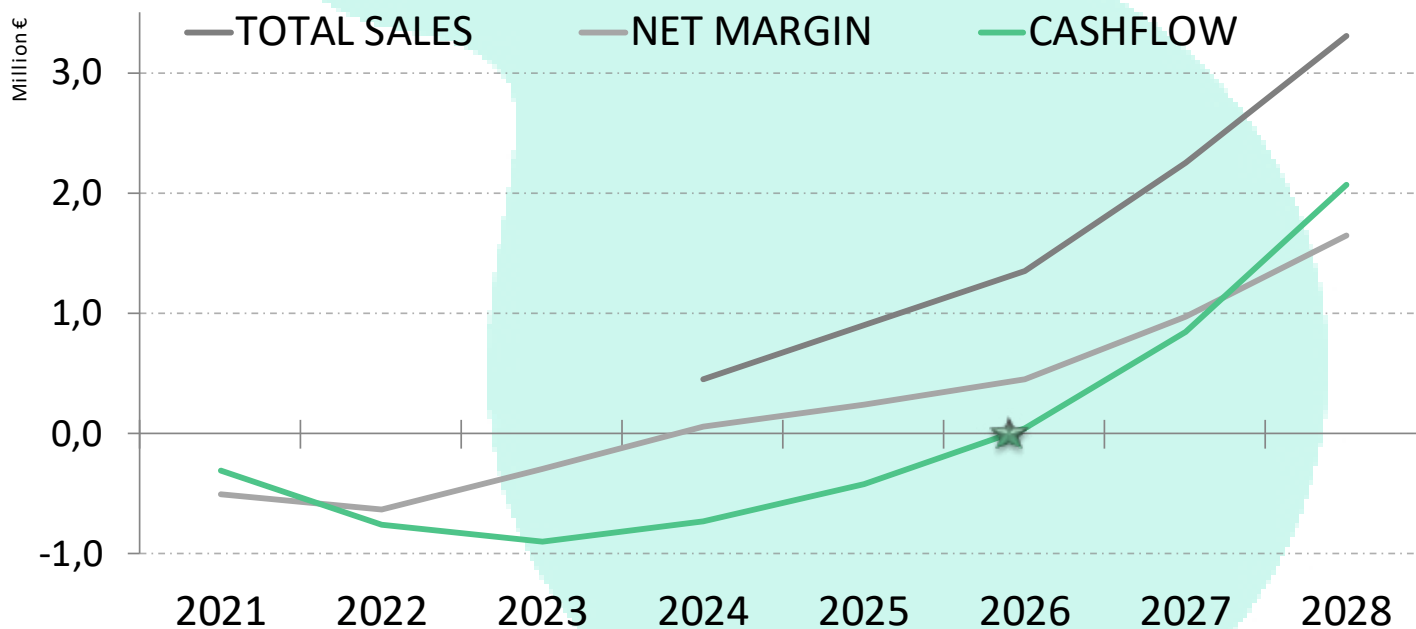
* Exosomes market size report / Grand View Research

Business Model

1. **Sell** EVs
2. **License** the use and methods to modify EVs
3. R&D contract:
Co-develop tailored EVs

Financials

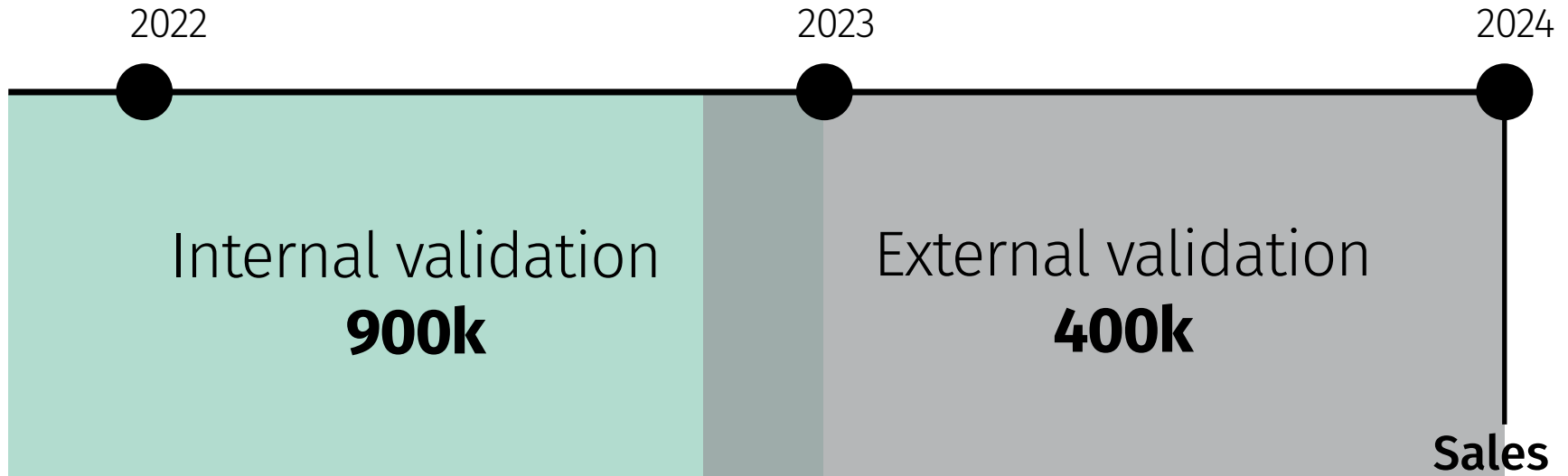
IRR: 34%



Team



1.3M Industrial validation



www.ves4us.eu

Laura Corcuera
lcorcuera@zabala.es

