

AI guided olistic approach to cure by art

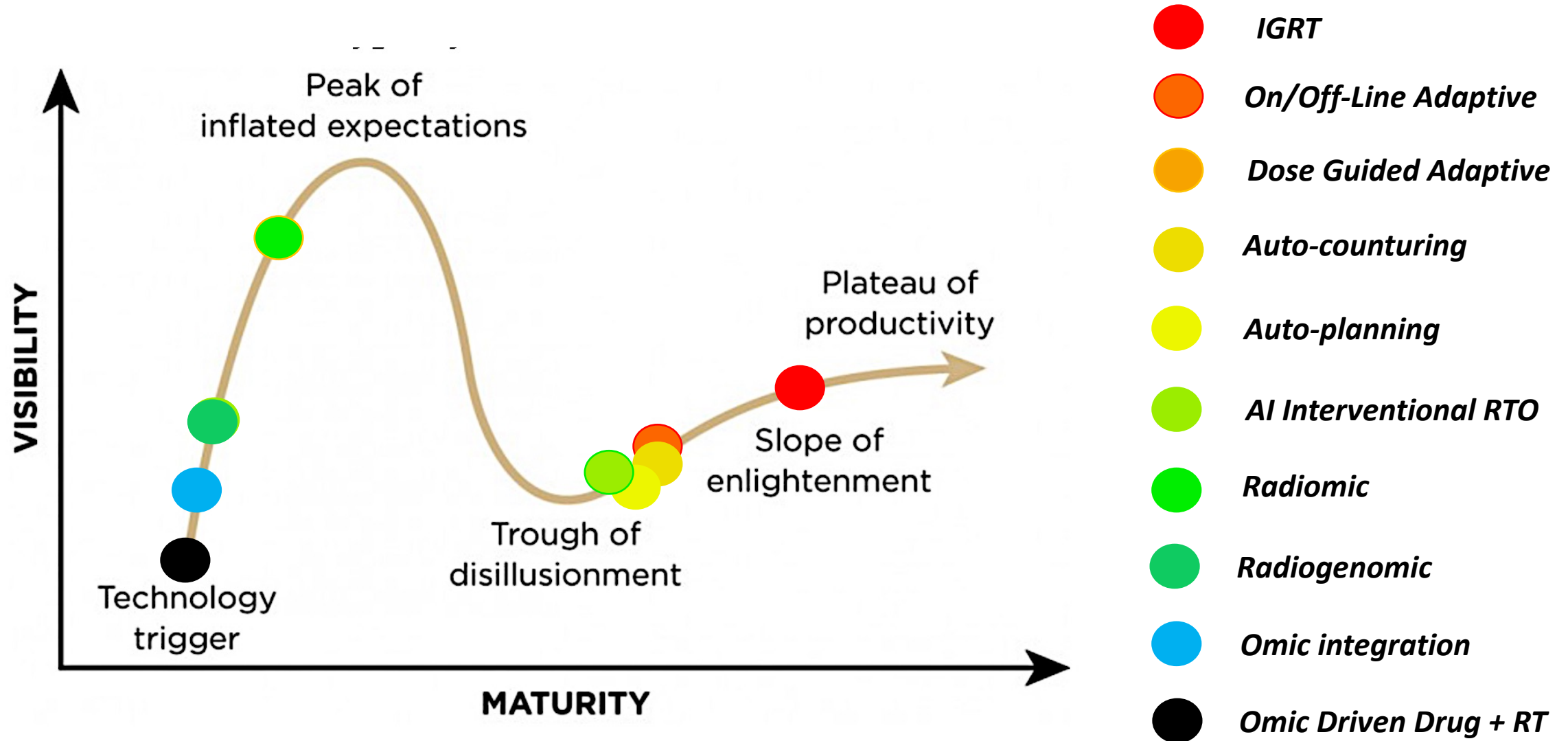
Disclosures

- Research collaborations incl. funding, consultancy and speaker honoraria
 - Pharma: AstraZeneca, Bayer, MSD, Pfizer, Sofar
 - MedTech: Accuray, Bebig, Elekta, GE, Siemens Healthineers, Varian Medical Systems, ViewRay
- Spin-offs and commercial ventures
 - KBO.com
 - Gemelli Digital Medicine & Health
- Various patents on RTO
- Public research funding
 - H2020 Terminet
 - H2020 iHelp
 - H2020 Re-Sample
 - H2020 Care4Covid

Radiation Oncology: where are we going?

- ***Image Guided Radiotherapy***
- ***AI Guided Radiotherapy***
- ***Omic Guided Radiotherapy***
- ***Humanist Guided Radiotherapy***

Innovation Hype: Modern Radiation Oncology



Personalized **against** Precision Medicine

Two dimension of the human should be identified:

Personalized against Precision Medicine

Two dimension of the human should be identified:

Actionable Values (emotion, culture, spirituality..)

Personalized against Precision Medicine

Two dimension of the human should be identified:

Actionable Values (emotion, culture, spirituality..)

Given World (science, deterministic rules, adaptation ..)

Personalized against Precision Medicine

Two dimension of the human should be identified:

Actionable Values (emotion, culture, spirituality..)

ART suggests **words** to narrate the **sense of the life**

Given World (science, deterministic rules, adaptation ..)

SCIENCE enables you to **live and interact** with the **world**

Personalized against Precision Medicine

Two dimension of the human should be identified:

Actionable Values (emotion, culture, spirituality..)

ART suggests words to narrate the sense of the life

Personalized Medicine

Given World (science, deterministic rules, adaptation ..)

SCIENCE enables you to live and interact with the world

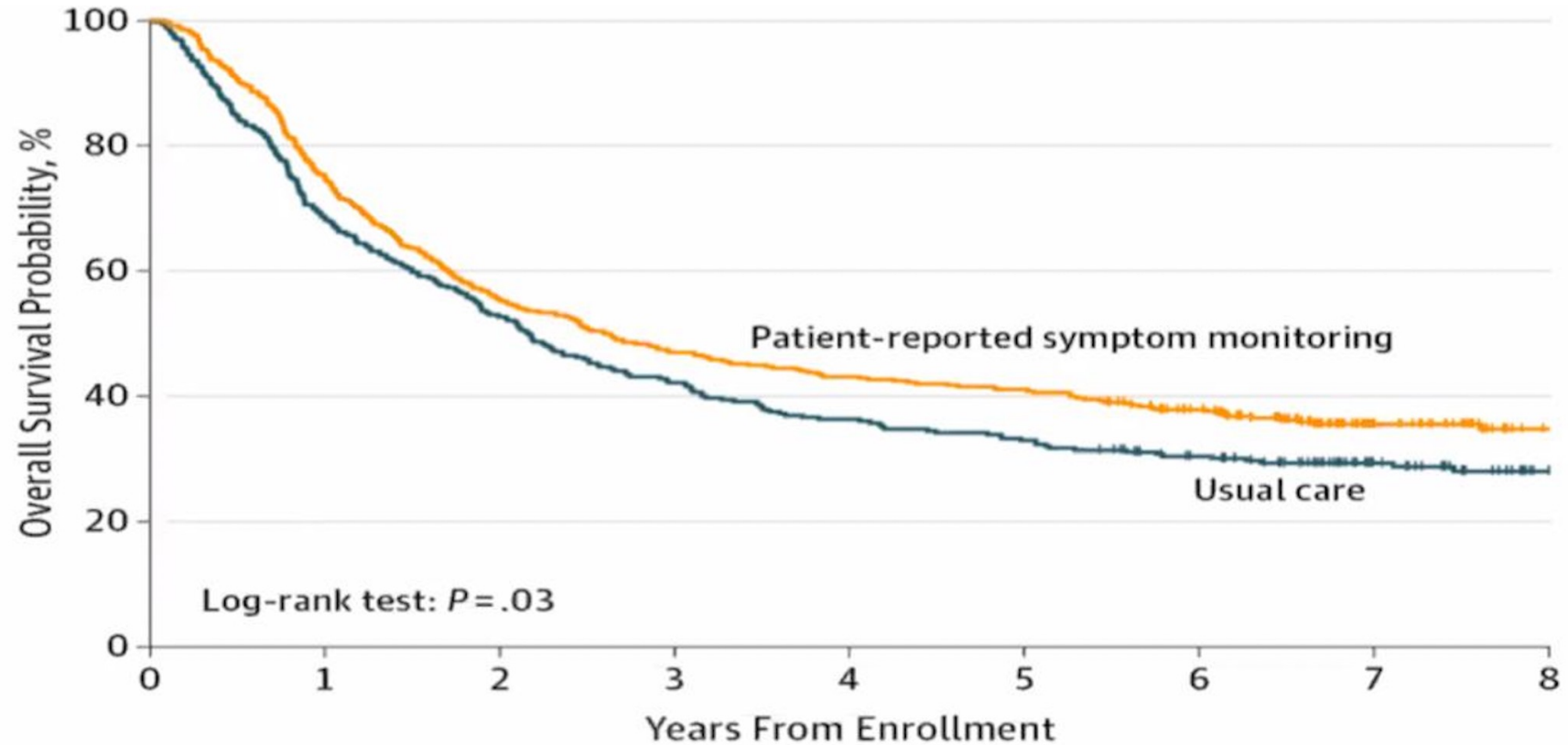
Precision Medicine

Humanism against **or** and **Science?**

Porous border

N.Berdjaev,
The meaning of creation, for a justification
of the human being, 1915 and following

Caring makes us live longer



No. at risk	0	1	2	3	4	5	6	7	8
Patient-reported symptom monitoring	441	331	244	207	190	181	148	65	33
Usual care	325	223	171	137	118	107	89	50	27

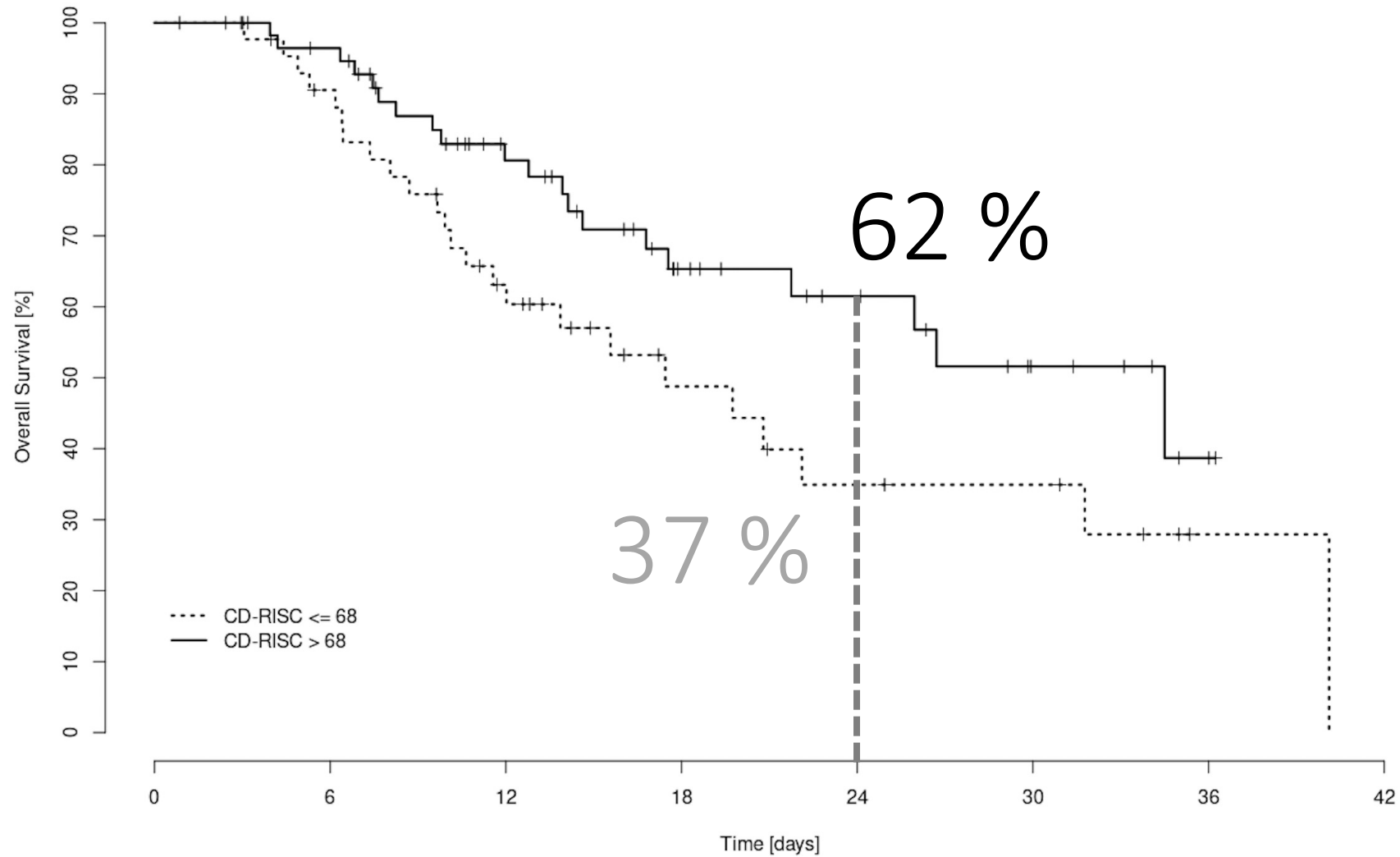
Spirituality and Resilience in Glioblastoma

✓ **Spirituality** is “a framework that provides people with a sense of ultimate purpose and meaning in life”

✓ **Resilience** is the “ability to withstand adversity and bounce back and grow despite life’s downturns”

- ✓ Multicentric observational protocol
- ✓ Tests: **Spirituality (FACIT-SP12); Resilience (CD-RISC).**
- 104 patients: 68 male, 36 female, median age 59.
- Median FUP was 338 days.

Spirituality and Resilience in Glioblastoma



A person wearing a grey lab coat, a hairnet, and a face mask is pointing their right hand towards a computer keyboard. The scene is dimly lit, with the keyboard and the person's hand being the primary focus. A bottle of hand sanitizer is visible in the background.

Pandemic time...

A person wearing a full white protective suit, including a hood and face mask, is working in a laboratory. They are leaning over a table covered with plastic sheeting, handling various pieces of equipment and containers. The background shows laboratory shelves and equipment.

...time of gestures



Pablo Picasso, Mother and Child, 1903

The gesture

Touching

Relief

Telling



Good practices

... in the millennium
of
creativity and relationships



... a good practice



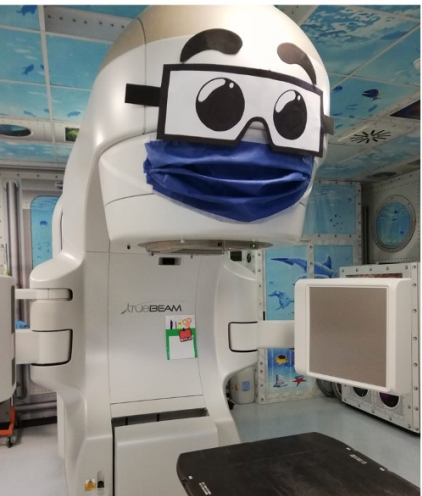
- Too many **changes**
- Too much **time!**
- Being **alone?!**
- It's **complicated!**

... a good practice

Insieme abbiamo sconfitto un mostro gigante che si chiama paura
per tutti quelli che credevano non ce la facessimo invece
dobbiamo essere qui e dire "c'ho fatta, l'ho sconfitta"

Together we have defeated a **giant monster** called **fear**, and to all those who
thought we could not do it, **we must be here** to say "I did it, **I beat it!**"

Aurora, 9-year-old



desidero ringraziare tutti quelli che mi aiutano e mi stanno
vicino. Spero che tutti i bambini malati del mondo possano
essere aiutati come me.

Ivan, 13-year-old

GRAZIE DI CUORE!!! ♥

I would like to thank all those who help me and **stand by me**. I hope that all
the sick children in the world **can be helped like me**. Thank you very much!!!

In spite of everything **you made me laugh**

Nonostante tutto lei avete fatto ridere,
Livia, 16-year-old



... a good practice







... a good practice

The screenshot shows the Art4ART website interface. At the top left is the 'Art4ART' logo. Next to it is a search bar with the text 'Search...'. On the top right, there are navigation icons (a grid, left and right arrows, a user icon, and a flag) and the text 'L. Biagiotti'. Below the navigation bar is a grid of categories. The first row contains eight sub-categories: Music, Poetry & Literature, Cinema, Nature, Painting, Monuments & Scultures, Photography, and Professions. Below these are eight rows of main categories, each with a corresponding colored header and eight empty colored boxes below it. The categories and their colors are: Friendship (orange), Love (yellow), Attention (orange-red), Courage (green), Self-care (cyan), Enthusiasm (blue), Passion (purple), and Spirituality (dark purple).

	Music	Poetry & Literature	Cinema	Nature	Painting	Monuments & Scultures	Photography	Professions
Friendship								
Love								
Attention								
Courage								
Self-care								
Enthusiasm								
Passion								
Spirituality								



... a good practice



Medley di Arie d'Opera - Fessure di Luce

Tratto dal concerto "Fessure di Luce" di Cristiana Pegoraro per il Gemelli ART

Artista: Cristiana Pegoraro
Video



Sinfonia di Praga - Sinfonia n. 38

Cianchettini & Sperati, Londra 1800

Autore: Wolfgang Amadeus Mozart
Audio



Senza Fine - Passione

dall'Album "Passione" - 2013

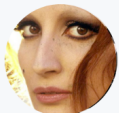
Artista: Andrea Bocelli
Audio



Benedetta Passione - Live in Paris

Tratto dall'Album Resta in Ascolto - 2004

Artista: Laura Pausini
Video



Amaro è 'o bene - "Una voce una città"

Dall'Album "Una voce una città" - 1980

Artista: Mina
Audio



Passione - Orchestra del Teatro Comunale di Bologna

Album - 1985

Autore: Luciano Pavarotti
Video

... a good practice



... a good practice



COMPASSION

SEMANTIC PROFILATION

ARTIFICIAL INTELLIGENCE

JUKEBOX

IOT

DATA MART

InterSystems
TRAKCARE™

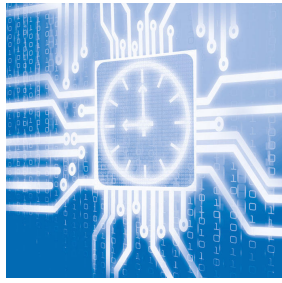
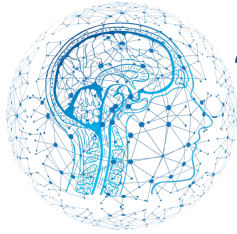
GEMELLI ART

.ART

Patients

Clinical services

TREATMENT

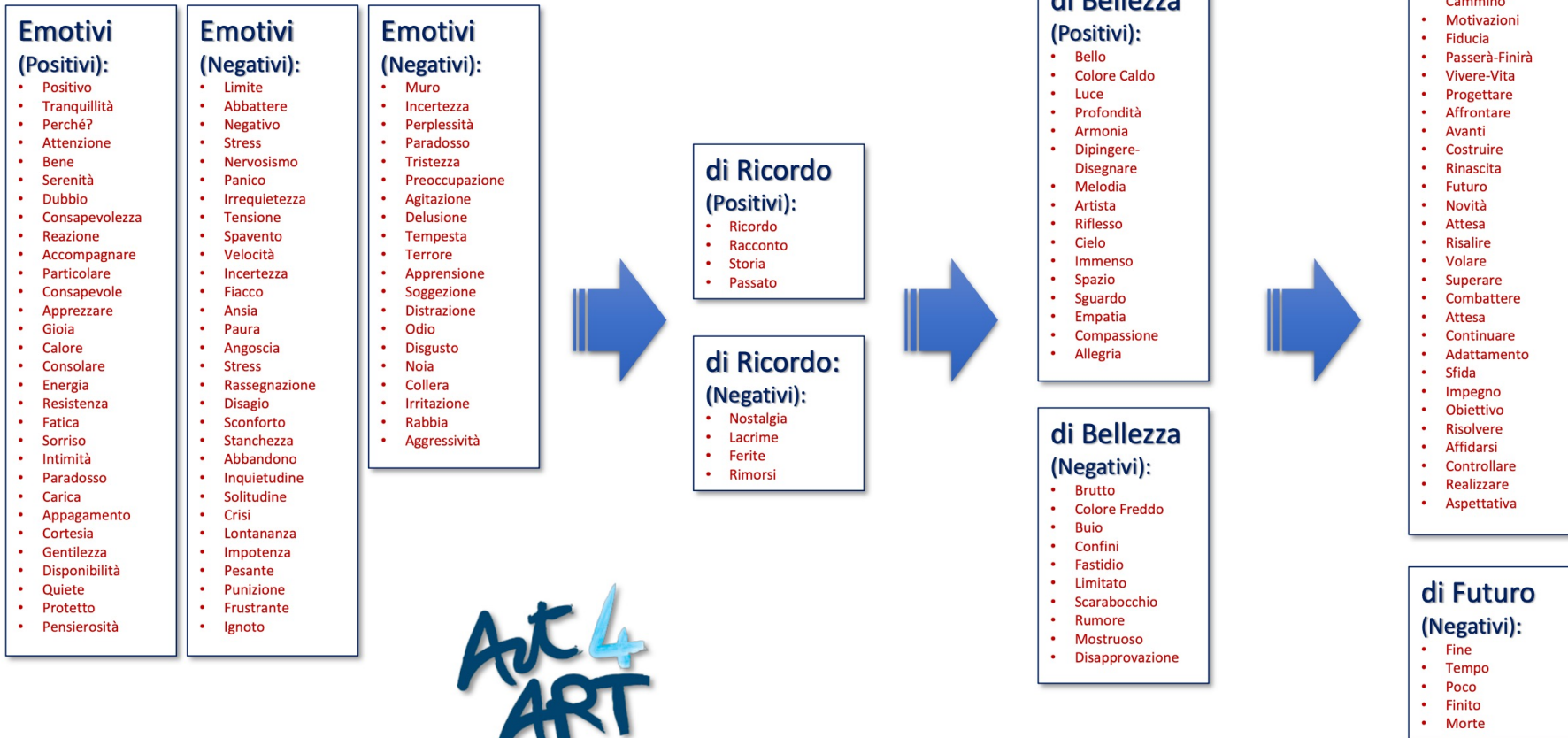


Project

SPIRITUALITY AND RESILIENCE IN GLIOBLASTOMA

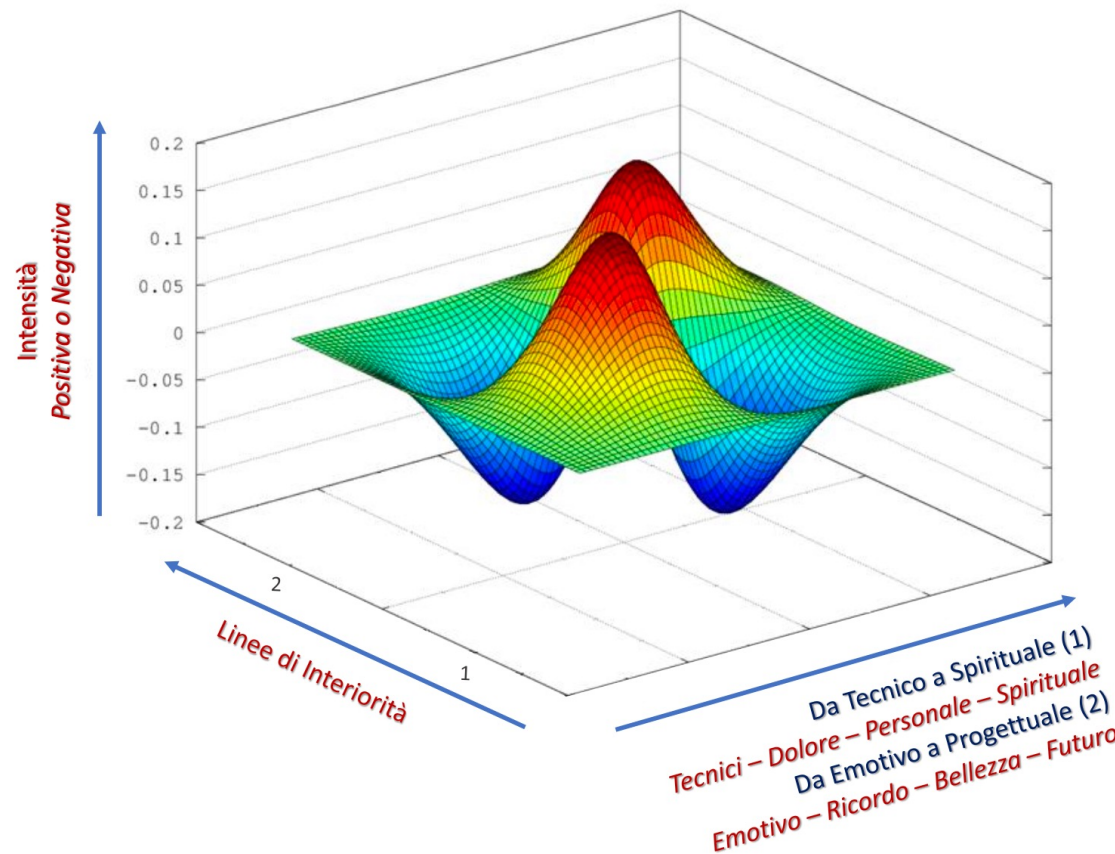
Linea di Interiorità 2

Termini...

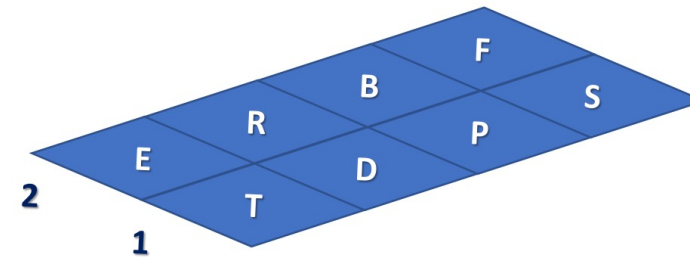


SPIRITUALITY AND RESILIENCE IN GLIOBLASTOMA

RETE DINAMICA INTERIORE PERSONALE



Art4
ART



Fonti:

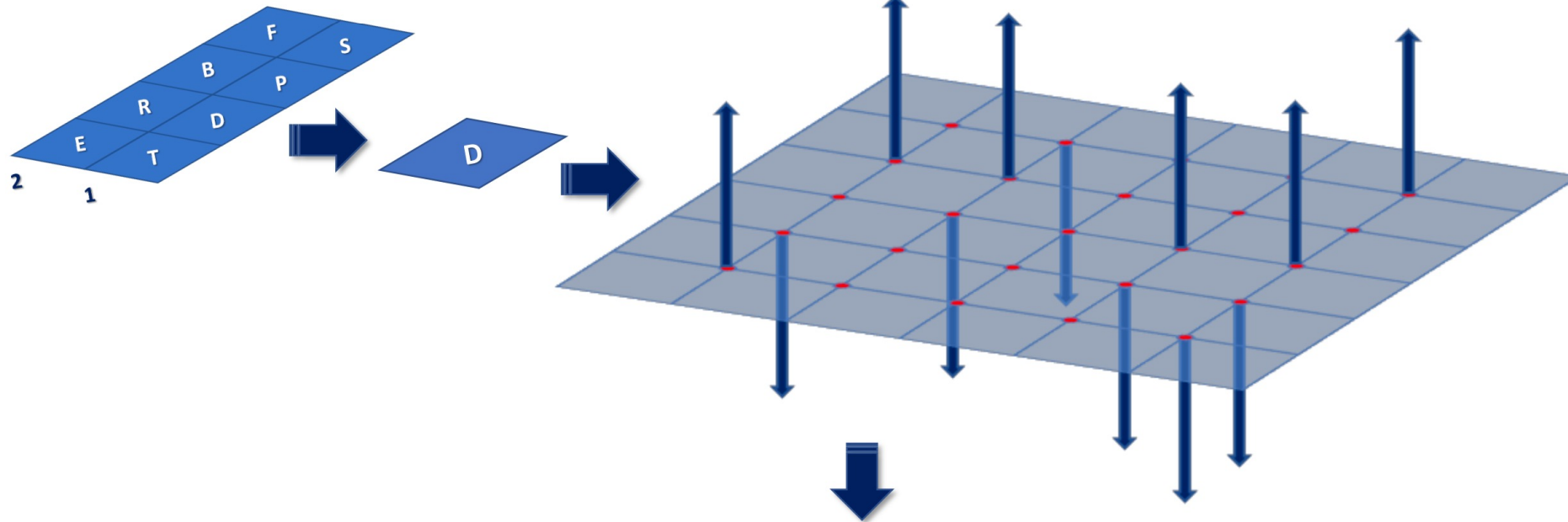
- *Questionario Resilienza;*
- *Questionario Spiritualità;*
- *Questionario Distress;*
- *Questionario Ansia e Depressione;*
- *Dizionario dell'Emotività;*
- *Semi di Bellezza;*
- *Rosa delle Emozioni;*
- *Narrativa Paziente e Cura;*
- *Confronto Teologico;*
- *Confronto Psicologico;*

USE CASE

SPIRITUALITY AND RESILIENCE IN GLIOBLASTOMA

RETE DINAMICA INTERIORE PERSONALE

Art4
ART



Rete Neurale



Molise ART





MATER ART
Advanced Radiation Therapy

The image shows an archaeological excavation of the Temple of Iuppiter Iurarius. The foreground is dominated by large, rectangular stone blocks, some of which are stacked in a pile on the left. The background shows more of the site, including a wall and some scaffolding. The text is overlaid on the right side of the image.

Tempio di Iuppiter Iurarius
(intorno al 200 a.C.)

Temple of Iuppiter Iurarius
(around 200 b.C.)



Fatebenefratelli Isola Tiberina
Gemelli Isola



Personalized against Precision Medicine

Two dimension of the human should be identified:

Actionable Values (emotion, culture, spirituality..)

ART suggests words to narrate the sense of the life

Personalized – Participative Medicine

Personalized against Precision Medicine

Two dimension of the human should be identified:

Actionable Values (emotion, culture, spirituality..)

ART suggests words to narrate the sense of the life

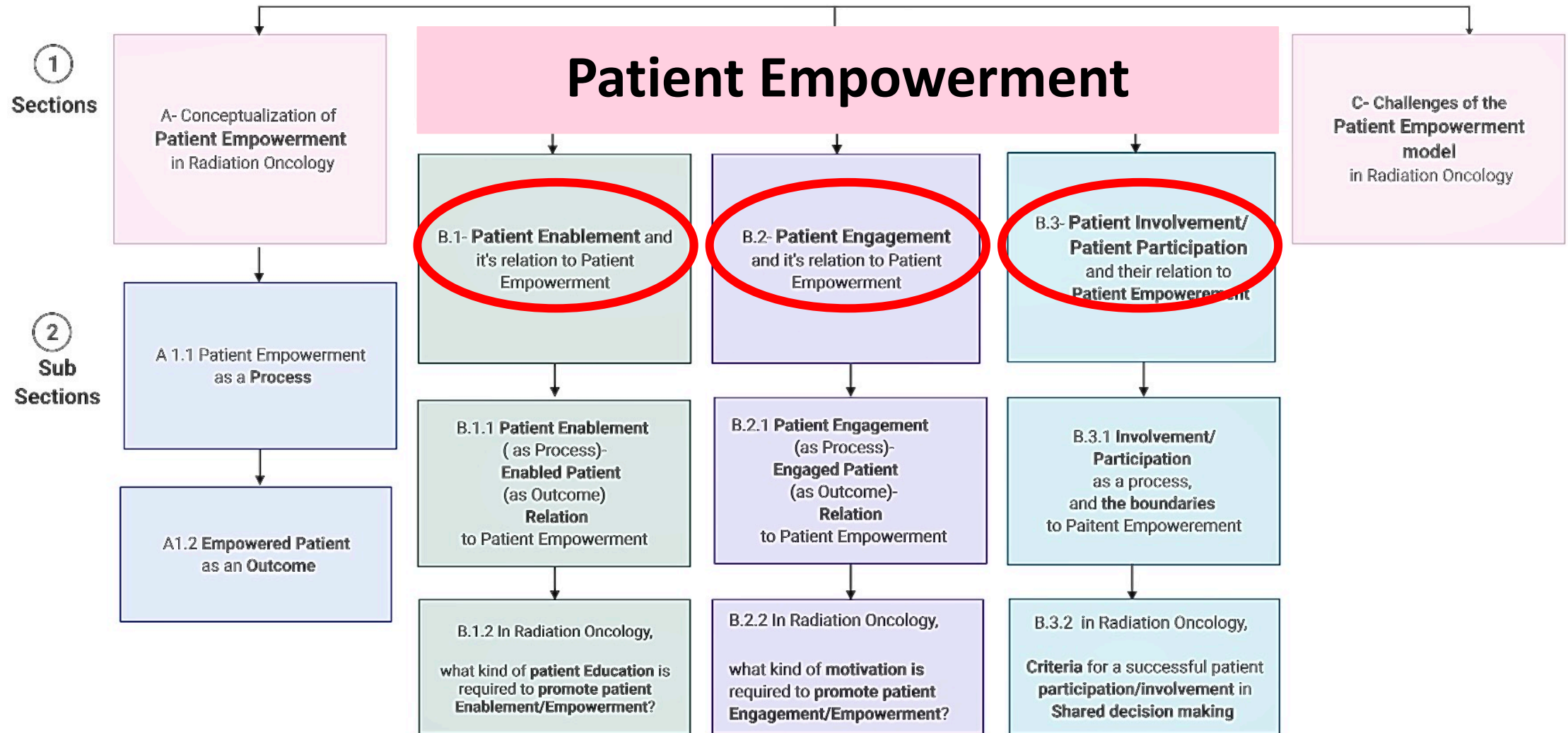
Personalized – Participative Medicine

Given World (science, deterministic rules, adaptation ..)

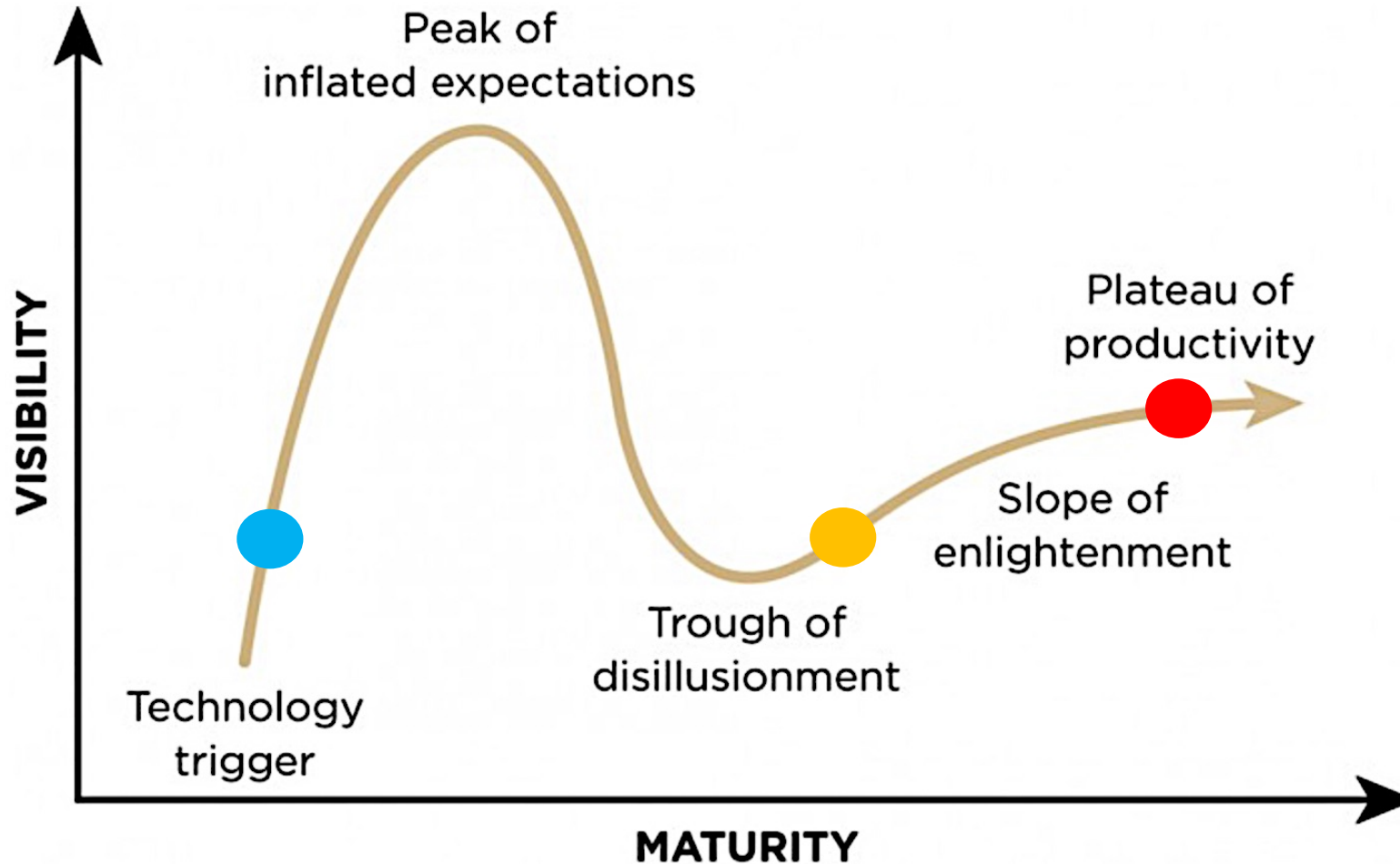
SCIENCE enables you to live and interact with the world

Precision - Participative Medicine

Participative Medicine



Innovation Hype: Humanism



Gestures



Art & Science



AI & Art & Science

