

HORIZON  
2020

# Cancer biOengineered Novel microTissues unrAveling Cancer plasTicity

## Fact Sheet

### Project Information

#### CONTACT

Grant agreement ID: 893129

#### DOI

[10.3030/893129](https://doi.org/10.3030/893129) 

Project terminated on 31 October 2022

#### EC signature date

6 April 2020

#### Start date

15 January 2021

#### End date

14 January 2023

#### Funded under

EXCELLENT SCIENCE - Marie Skłodowska-Curie  
Actions

#### Total cost

€ 171 473,28

#### EU contribution

€ 171 473,28

#### Coordinated by

FONDAZIONE ISTITUTO  
ITALIANO DI TECNOLOGIA

 Italy

## Project description

### A bioengineered model for investigating plasticity in triple negative breast cancer

Patients with triple negative breast cancer (TNBC) present a higher risk of recurrence and metastasis as existing chemotherapeutic strategies fail in nearly half of the cases. Recently, oncologists and researchers have started to focus their attention not only on cancer cells but also on their interactions with the microenvironment surrounding them. It is clear that the current methods of

investigation are not able to grasp the complexity of these interactions. In vitro models that faithfully recapitulate the disease are urgently needed for the development of novel treatments. To address this, scientists of the EU-funded CONTACT project will develop a 3D bioengineered TNBC in vitro model that combines stromal components along with cancer cells. This tool will be useful in studying the mechanisms of interaction between cancer cells and their microenvironment as well as the reprogramming events triggering drug-tolerance. Long term, by using these models as a sort of patient's avatar, it will become possible to establish patient-tailored treatment protocols based on combinatory therapy.

## Fields of science (EuroSciVoc)

[natural sciences](#) > [biological sciences](#) > [genetics](#)

[medical and health sciences](#) > [clinical medicine](#) > [oncology](#) > [breast cancer](#)



## Keywords

[Triple negative breast ca.](#)

[Spheroids](#)

[3D cultures](#)

[Drug response and](#)

[or resistance](#)

[Microenvironment](#)

[Extracellular Matrix](#)

[\(ECM\).](#)

[Stroma](#)

## Programme(s)

[H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions](#)

MAIN PROGRAMME

[H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility](#)

## Topic(s)

[MSCA-IF-2019 - Individual Fellowships](#)

## Call for proposal

[H2020-MSCA-IF-2019](#)

[See other projects for this call](#)

# Funding Scheme

[MSCA-IF - Marie Skłodowska-Curie Individual Fellowships \(IF\)](#)

## Coordinator



### FONDAZIONE ISTITUTO ITALIANO DI TECNOLOGIA

Net EU contribution

**€ 171 473,28**

Total cost

**€ 171 473,28**

Address

**VIA MOREGO 30**

**16163 Genova**

 **Italy** 

Region

**Nord-Ovest > Liguria > Genova**

Activity type

**Research Organisations**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

**Last update:** 24 July 2023

**Permalink:** <https://cordis.europa.eu/project/id/893129>

European Union, 2025