

# Annual Report

# Grant Period 1

**COST Action CA21135 IMMUNO-model**

**“Modelling immunotherapy response and toxicity in  
cancer”**

**(2022-2026)**

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### Document history

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## TABLE OF CONTENTS

1. Overview of activities in GP1 .....	5
2. Overview of WG activities.....	8
2.1. <i>WG1</i> .....	8
2.2. <i>WG2</i> .....	8
2.3. <i>WG3</i> .....	8
2.4. <i>WG4</i> .....	8
2.5. <i>WG5 and Science Communication activities</i> .....	9
3. Events.....	9
3.1. <i>Training School and Workshops</i> .....	9
3.1.1 1 <sup>st</sup> Workshop “Modelling Immuno-Oncology”, March 30th, 2023 (online event) ...	9
3.1.2 2 <sup>nd</sup> Workshop Joint EUSICA + IMMUNO-model Workshop: Fostering collaboration to advance sinonasal cancer research and endoscopic sinus and skull base surgery, May 3-4, 2023,.....	11
3.1.3 1 <sup>st</sup> Training School “Exploring the Microphysiological Systems, 20 – 22 September 202, in person and hands-on at the Izmir Institute of Technology (IZTECH), Turkey ....	12
3.2. <i>Annual conference, Badalona, Spain</i> .....	12
4. Meetings.....	13
4.1. <i>Core Group meetings</i> .....	13
4.2. <i>MC meetings</i> .....	17
4.3. <i>WG meetings</i> .....	19
4.3.1 <i>WG1 meetings</i> .....	19
4.3.2 <i>WG2 meetings</i> .....	20
4.3.3 <i>WG3 meetings</i> .....	21
4.3.4 <i>WG4 meetings</i> .....	22
4.3.5 <i>WG5 meetings</i> .....	22
5. Mobility Grants .....	23
6. Dissemination and Communication Activities.....	25
6.1. <i>Webpage and logo</i> .....	25
6.2. <i>Social media platforms</i> .....	25
6.3. <i>Scientific publications</i> .....	25
7. Target Group Recruitment Committees (TGRCs) activities .....	29
8. Summary and directions for GP2 .....	30

## 1. Overview of activities in GP1

During the first grant period (GP), many activities were carried out, details of which may be found in the following sections of this report. Of highlight are the two workshops and the Annual Conference.

The first workshop was held online and was an overwhelming success in terms of attendance, with over 200 people connected at any one time. The second workshop was co-organised with the EUSICA consortium which is dedicated to sinonasal tumours. It was held in a hybrid format in Copenhagen (Denmark) and was very well attended in person. This workshop resulted in a publication in the form of a conference report (PMID: 37573683). Finally, the first Annual Conference was held in Badalona (Spain) on 1-2 June 2023. It was a resounding success in terms of attendees (with more than 100 people attending in person), which strengthened collaborations between participants and the Action. It is hoped that the fruits of these meetings will start to be felt during the second grant period.

At the end of September, a Training School (TS) was organised at the Izmir Institute of Technology (IZTECH) in Turkey, which aimed at introducing microphysiological systems (MPS). MPS mimic the *in vivo* microenvironment and present great *in vitro* models, contributing to the 4Rs. Thirteen trainees attended the lectures and hands-on sessions. With the theoretical and practical information gained, the trainees will be able to adopt MPS into their research and in line with IMMUNO-model.

It is important to mention that during this period several meetings of the Working Groups (WGs) were held, which were useful for the participants to get to know one another and start proposing activities to achieve the objectives of the Action. In addition, one of the Working Group 4 (WG4) meetings was held face-to-face at an event in Romania, organised by a WG4 member who offered WG4 attendees' free registration to this event.

With these and the other activities detailed below, we have laid out the foundation stones for the project, which it is hoped that it will finally take off during the second grant period.

### Meetings

- Workshop 1 Modelling Immuno-Oncology, on 30/03/2023, virtual, led by Working Group 2. 77 Unique Participants
- Workshop 2 Sinonasal Cancer, on 3<sup>rd</sup> and 4<sup>th</sup> May 2023 in Copenhagen, Denmark. 59 Unique Participants
- IMMUNO-model Annual Conference, on 1<sup>st</sup> and 2<sup>nd</sup> June 2023, in Badalona, Spain. 189 Unique Participants
- Working Group 4 Workshop, on 8<sup>th</sup> September 2023, Cluj-Napoca, Rumania. 18 Unique Participants
- 10 Core Group Meetings, one in person.
- 3 Management Committee Meetings, 1 in person and 2 virtual.

### Training School: Microphysiological Systems

- 20-22 September 2022 at the Izmir Institute of Technology (IZTECH), Turkey

- 6 trainers and 13 participants

### Grants

- 7 STSM
- 1 ITC

### Dissemination Materials:

- Action Logo
- Action Website
- Various Flyers for the dissemination of IMMUNO-model and for grants calls
- Power Point template
- Promotional video
- Animated Video

### Other Expenses Related to Scientific Activities (OERSA)

- Bank Charges

### Budget

	Forecasted Budget			Actual Expenditure		
		LOS	TOTAL		LOS	TOTAL
1st IMMUNO-model workshop			900,00			0,00
2nd IMMUNO-model workshop	16.432,00	4.000,00	20.432,00	17.035,31	3.741,00	20.776,31
1st IMMUNO-model Annual Conference	44.116,00	4.000,00	48.116,00	39.991,15	7.605,45	47.596,60
3rd IMMUNO-model Workshop		900,00	900,00			0,00
WG4 in Rumania	0,00	0,00	0,00	6.730,89	0,00	6.730,89
Core Group Meeting Netherlands	0,00	0,00	0,00	8.728,71	818,75	9.547,46
MC3 meeting virtual	0,00	0,00	0,00	0,00	600,00	0,00
1st IMMUNO-model Summer School	20.124,00	3.500,00	23.624,00	15.493,23	0,00	15.493,23
STSM			22.050,00	12.280,00	0,00	12.280,00
ITC Conference			3.000,00	510,00		510,00
Dissemination Conference			3.000,00			0,00
Logo			800,00	790,00		790,00
Website			4.000,00	3.500,00		3.500,00
Flyer design			250,00	90,00		90,00
PPt Slide			0,00	90,00		90,00
Promotional Video				6.090,00		6.090,00
Animated video				3.900,00		3.900,00
Flyer designs for other calls				375,00		375,00
Publications			3.383,00	0,00		0,00

Zoom license			500,00	0,00		0,00
Consumables for training			1.352,00	0,00		0,00
Shipping costs			300,00	0,00		0,00
Bank charges	0,00	0,00		502,00		502,00
<b>Total</b>			<b>132.607,00</b>			<b>128.271,49</b>

<b>Remaining budget</b>	<b>4.335,51</b>
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Activities that did not take place
New Activities not in original budget
Underspent

## 2. Overview of WG activities

### 2.1. WG1

Two meetings were held. Paths and tools to achieve objectives of IMMUNO-model COST Action, particular to WG1., were discussed. The focus for the first year was to start collaborations and realize publications. Please see more details in Section 4.

### 2.2. WG2

One workshop and one meeting were held. Paths and tools to achieve objectives of IMMUNO-model COST Action, particular to WG2, were discussed. The focus for the first year was to start collaborations and realize publications. In particular, it was agreed on writing one or more review articles highlighting pros and cons of various technologies and various species as model systems for modelling different diseases. Please see more details in Section 4.

### 2.3 WG3

In May 2023, WG3 held its inaugural online meeting, drawing more than 50 enthusiastic participants who actively engaged in discussions. During this gathering, it was outlined the workgroup's objectives, and diverse opportunities were explored such as Short-Term Scientific Missions (STSMs), workshop organization, and training school participation. Since the initial meeting, an interactive approach was adopted for subsequent meetings, allowing members to schedule themselves on the agenda, fostering discussions on specific scientific questions, challenges, sample sharing and STSMs prospects. Notably, Prof. Dr. Chiara Riganti shared her insights on achieving COST success, Dr. Bozena Smolková presented plans for the 2024 Annual Conference in Slovakia, and Dr. Rebeca Sanz-Pamplona and Dr. Maurizio Callari proposed establishing a Computational Immune-Oncology taskforce, with the online Kick-Off meeting on September 13<sup>th</sup> (still welcoming members to join!). Reflecting on an exciting first year, the WG Leaders are dedicated to further shape the working group and advancing the objectives collectively in the coming years.

### 2.4 WG4

The IMMUNO-model WG4 on Hematologic Malignancies is currently composed of 46 researchers from 16 different countries and multidisciplinary backgrounds. Over the first grant period WG4 developed the following activities towards the achievement of the goals of the IMMUNO-model COST Action:

- Organization of three WG meetings (55% participation in the last WG meeting)
- Organization of a co-located event (3<sup>rd</sup> WG4 meeting) together with the Insights in Hematology Conference at Cluj-Napoca, Romania (an ITC country).
- Two of our WG members (Emanuele Azzoni and Cristiana Barone) were funded through our Short-Term Scientific Missions (STSMs) program to be trained in *in vivo* hematopoietic transplantation models at the Institut Pasteur in Paris, France.

The following table summarizes how these activities associated the IMMUNO-model's Research Coordination and Capacity-building Objectives:



		WG4 Activities		
		WG meetings	Co-located event in Romania	STSM
Research Coordination Objectives	To foster the collaboration between researchers	✓	✓	✓
	To collect, integrate and organize experimental data	✓		
	To facilitate the transferability of knowledge	✓		✓
Capacity-building Objectives	To build up a critical mass of immuno-oncology researchers	✓	✓	
	To promote the participation in IMMUNO-model of young researchers, women, and investigators from Inclusive Target Countries (ITCs)	✓	✓	✓
	To become a network of reference in the field of immunotherapy research		✓	

### 2.5 WG5 and Science Communication activities

The activities underlying this WG were performed by gathering other WGs' activities to be disseminated by means of the website, social media, scientific meetings and manuscripts, etc. In this regard the following are the activities that were performed during GP1:

- Dissemination & Communication Plan was prepared and approved by MC
- Webpage and social media platform establishment and its management
- Promotional materials (logo, flyers, videos, ppt templates) were set up and produced
- Dissemination of IMMUNO-model COST activities and results (scientific papers, EACR advertisement etc.)
- Collaboration with the MC to define the best options and tools to pursue the objectives of WG5 (slack, emails, members area on webpage)
- Annual Report GP1

There was a change of leadership in August 2023 since COST suspended cooperation with Action participants affiliated to Hungarian legal entities affected by the Council Decision 2022/2056. New leadership:

- Barbara Breznik, WG5 leader
- Rosalinda Sorrentino, WG5 co-leader

## 3. Events

### 3.1. Training School and Workshops

#### 3.1.1 1<sup>st</sup> Workshop “Modelling Immuno-Oncology”, March 30th, 2023 (online event)

Objective: Provide an introduction to various technologies and various model species.

The “Modeling Immuno-Oncology” workshop focused on *in vivo*, *ex vivo* and *in vitro* models. Internationally renowned speakers presented their work on a rich selection of topics such as targeted therapies, the role of select pathways and translational patient models.

Number of participants: 197, targeted audience: advanced scientists, postdocs and PhD students.

The workshop was very successful and a good starting point for future collaborations within the group.

Program with topics:

- 10:30 -11:00 Welcome and Opening: IMMUNO-model – what it is about  
Prof. Johannes Haybaeck, MD, PhD *Institute of Pathology, Neuropathology and Molecular Pathology, Medical University of Innsbruck, Austria*
- 11:00-11:20 Treg-targeted therapies for immuno-oncology using humanized mice  
Gilles Marodon *CIMI-PARIS, Sorbonne University, INSERM, CNRS*
- 11:30-11:50 Mouse models used to study the adoptive cell therapy to treat tumors  
Roberta Sommaggio *Department of Surgery Oncology and Gastroenterology University of Padova, Italy and Veneto Institute of Oncology IOV-IRCCS*
- 12:00-12:20 Gain or loss of function in the STAT5A or STAT5B pathways and consequences for immunity or T-cell cancer initiation and progression  
Rickard Moriggl *Ludwig Boltzmann Institute for Cancer Research and Institute of Animal Breeding and Genetics, University of Veterinary Medicine Vienna*
- 12:30-12:50 Patient-derived cell culture models in translational oncology  
Christian Regenbrecht *CELLphenomics GmbH*
- 13:00-13:45 Lunch
- 13:45-14:05 Tailoring nanocarrier delivery-targets with Chemokines  
Giuseppe Bardi *NanoBioInteractions & Nanodiagnosics - Istituto Italiano di Tecnologia (Genova, Italy)*
- 14:15-14:35 Advanced ovarian cancer models for immunotherapy applications – key aspects, major drawbacks, and future perspectives  
Katrin Kleinmanns *Centre for Cancer Biomarkers CCBIO, Department of Clinical Science, University of Bergen*
- 14:45-15:05 Modeling the tumor microenvironment heterogeneity and immune vascular cross-talks in ex-vivo microphysiological models  
Marco Campisi *Dana-Farber Cancer Institute, Dept. of Medical Oncology, Boston, MA, US*
- 15:15-15:35 Pet dogs as translational patient models for cancer immunotherapy development  
Amy LeBlanc Senior Scientist and Director, *Comparative Oncology Program, Center for Cancer Research, National Cancer Institute, National Institutes of Health*
- 15:45-16:05 Modeling Immuno-Oncology in Humanized Mice  
Michael Brehm *Diabetes Center of Excellence, Program in Molecular Medicine University of Massachusetts Chan Medical School*

16:15-16:30 Closing remarks

3.1.2 2<sup>nd</sup> Workshop Joint EUSICA + IMMUNO-model Workshop: Fostering collaboration to advance sinonasal cancer research and endoscopic sinus and skull base surgery, May 3-4, 2023, Hybrid format; Rigshospitalet, Copenhagen, Denmark

59 participants, researchers and clinicians

Local Organizers: Christian von Buchwald and Patrick René Gerhard Eriksen from the Rigshospitalet, Copenhagen, Denmark

The Workshop focused on sinonasal tumours, a rare and heterogeneous malignancy, presenting different histological features and clinical behaviour affecting fewer than 1 person out of 100,000 individuals per year worldwide. Although there are no standard or evidence-based therapeutic strategies, immunotherapy may have a role in some types of sinonasal cancers. In this regard, pre-clinical models of sinonasal cancer that are able to test their sensibility to this kind of treatments may boost research in the field. Clinical and translational research aspects in this type of tumours were discussed and IMMUNO-model brought its experience in preclinical models in immuno-oncology. The aim of the workshop was to foster research in this type of tumours and to establish future collaborations with EUSICA. A conference report was published as a result (PMID: 37573683)

Scientific committee:

Christian von Buchwald, Rigshospitalet, Copenhagen, Denmark

Eva Martinez-Balibrea, Catalan Institute of Oncology and Germans Trias i Pujol Research Institute, Badalona, Spain

Matt Lechner, Cancer Institute, University College London, London, UK

Mario Hermsen, Instituto de Investigación Sanitaria del Principado de Asturias (ISPA), Spain

Leticia Oliveira Ferrer, University Medical Center Hamburg-Eppendorf, Hamburg, Germany



### 3.1.3 1<sup>st</sup> Training School “Exploring the Microphysiological Systems, 20 – 22 September 202, in person and hands-on at the Izmir Institute of Technology (IZTECH), Turkey

The aim of the training school was to provide an introduction to microphysiological systems (MPS). MPS mimic the *in vivo* microenvironment and present great *in vitro* models, contributing to the 4Rs. Trainees attended lectures and hands-on sessions. With the theoretical and practical information gained, the trainees will be able to adopt MPS to their research in line with the COST Action. There was also a design challenge where trainees were encouraged to work on their own MPS designs.

Number of participants: 13, targeted audience PhD students given priority.

The training school was successful. Sample feedback from participants:

“Very well organized, and very useful for our research. Such a nice experience from meeting people from all over the world using 3D models and chips.”

“The training school "Exploring the Microphysiological Systems" was a very well organized event. The training covered all the basic steps required to obtain an overall understanding of this field of research. All the lectures were complemented with excellent practical sessions where we had the opportunity to put into practice what we learned and, therefore, to actually acquire the required skills to translate this learning experience into our own research.”

“It was really well organised and all of the members of the local group were super helpful with everything. The topic is a novelty and I think is great to make courses for young researchers to learn and implement the techniques in our labs abroad. Thank you very much to everyone in charge of the event! It was a lovely experience :)”



### 3.2. Annual conference, Badalona, Spain

The hybrid conference titled “Exploring the Frontiers of Cancer Immunotherapy: From Models to Breakthroughs” took place on June 1 and 2 at the Josep Carreras Leukaemia Research Institute in Badalona (Barcelona, Spain). The event attracted a total 100 in-person and 80 virtual participants on the first day, and 80 in-person and 50 virtual attendees on the second day.

The conference aimed to spotlight novel experimental models that bridge laboratory discoveries on immunotherapy research with clinical breakthroughs. The meeting provided a platform to explore a diverse array of experimental models encompassing *in vitro*, *ex vivo*, and *in vivo*

approaches, which offer unique opportunities to delve into the intricate interplay between the immune system, tumour microenvironment, and immunotherapy interventions in a controlled and clinically relevant context.

The conference featured six distinguished invited speakers, including renowned figures in the field of immunotherapy such as David Barbie and Silvia Formenti. Their expertise illuminated the latest advancements and future directions in cancer immunotherapy. Moreover, the event showcased the work of other participating researchers through nine selected abstracts for oral presentation and sixteen for poster presentation. This provided a forum for attendees to exchange insights, discuss challenges, and explore innovative strategies for advancing immunotherapy research.

Notably, 49 attendees received travel support attend the conference, underscoring IMMUNO-model's commitment to facilitating broader participation and knowledge exchange within the scientific community.

In summary, the 1<sup>st</sup> IMMUNO-model conference served as a dynamic platform for advancing the frontiers of cancer immunotherapy, bringing together diverse perspectives and expertise to drive meaningful progress in the fight against cancer.



## 4. Meetings

### 4.1. Core Group meetings

Name	Date	Virtual/in person	Number of participants	Summary of decisions / relevant issues
Core Group Meeting 1	15/11/2022	Virtual	10	<ul style="list-style-type: none"> <li>Final leadership positions were decided.</li> <li>To identify a company for design of website and logo</li> <li>Database was discussed</li> <li>Inclusiveness policy and coordinator to be appointed</li> <li>First workshop to be organised online in March</li> <li>2nd workshop with EUSICA to be held in May as co-organised</li> <li>WGs applications forms discussed</li> <li>Grants evaluation committee set up</li> </ul>

				<ul style="list-style-type: none"> <li>Dissemination channels</li> <li>Annual Conference's possible locations were discussed</li> </ul>
Core Group Meeting 2	05/12/2022	Virtual	7	<ul style="list-style-type: none"> <li>WG applications, to decide structure of approvals</li> <li>Website/Logo/Online meetings platform: Boutik explained services</li> <li>2nd workshop with EUSICA, contacting organisers</li> <li>Dissemination channels, decided to use Slack</li> <li>Next CG meetings: a set of dates was proposed</li> </ul>
Core Group Meeting 3	13/01/2023	Virtual	15	<ul style="list-style-type: none"> <li>WG applications: update on applications and procedure</li> <li>Website update: Boutik to create website</li> <li>Discussion of structure and logo design</li> <li>1st Workshop: will be set in motion once WGs are set up</li> <li>2nd Workshop: EUSICA + COST: 3 &amp; 4 May, hybrid, Copenhagen, Denmark</li> <li>Communication channels update: Slack not working well so far</li> <li>TGRCs: currently Denis Collins and Hanne Haslene-Hox appointed, 3rd position pending. Denis Collins to look into Inclusiveness Policy examples</li> <li>Annual Conference: 1 &amp; 2 June 2023, hybrid. No volunteer yet to organise it</li> <li>Training schools: No volunteer yet to organise it</li> <li>Zoom license: to be discussed with IT at IGTP</li> <li>First call of STSMs: forms to be drafted and website to be operative</li> <li>Hanne Haslene-Hox (with help from Eva, Arpad and Emmet) wrote an abstract about IMMUNO-model for the National Biochemistry Society Annual Conference in Norway.</li> <li>Possible publication: Philippe Bertrand is writing a review about inhibitors on immune checkpoints for the European Journal of Medicinal Chemistry. He shared the draft.</li> <li>GH manager update: no candidate yet</li> </ul>
Core Group Meeting 4	10/02/2023	Virtual	15	<ul style="list-style-type: none"> <li>More budget available from COST, a proposal is to be prepared</li> <li>WGs applications: strategies to increase applications were discussed</li> <li>Website update: domain working and discussion of logo proposals</li> <li>EFIS funding: to be looked into</li> <li>Communication channels: different options were discussed</li> </ul>

				<ul style="list-style-type: none"> <li>• Inclusiveness coordinator: discussion on inclusivity Policy</li> <li>• TGRC1: Gianmarco Contino was appointed</li> <li>• Task forces on Bioinformatics: to be decided</li> <li>• Training schools: no volunteers to organise it yet</li> <li>• Zoom license: GHM to be in charge of email linked to account</li> <li>• First call of STSMs: applications to open soon, draft of final call, setting up of committee</li> <li>• Proposal of applying for European Association for Cancer Research travel grants</li> <li>• GH Manager: candidate has been appointed</li> <li>• E-COST platform: meetings to be encoded and invitations to be sent</li> </ul>
Core Group Meeting 5	10/03/2023	Virtual	11	<ul style="list-style-type: none"> <li>• Proposal accepted for additional COST funding: <ul style="list-style-type: none"> <li>◦ Increase of average long-distance costs from €400 to €500 to take into consideration speakers from outside Europe.</li> <li>◦ Workshop 2: increase participants to be reimbursed from 16 to 20</li> <li>◦ Annual Conference: increase participants to be reimbursed from 30 to 39</li> <li>◦ Dissemination grant: an additional €1000</li> <li>◦ Increase the number of STSMs to be funded</li> </ul> </li> <li>• Website feedback sent back to Boutik</li> <li>• 1st Workshop update: draft program presented</li> <li>• 2nd Workshop EUSICA + COST update: a call for abstract is to be launched</li> <li>• Denis Collins working on the draft of the Inclusiveness policy</li> <li>• Laura Belver volunteered to host and organise the Annual Conference at IJC, 1 &amp; 2 June 2023. First draft of programme discussed as well as participants to be reimbursed</li> <li>• Organizing summer school: still no volunteers!</li> <li>• STSMs: first draft of documentation for applicants ready</li> </ul>
Core Group Meeting 6	14/04/2023	Virtual	11	<ul style="list-style-type: none"> <li>• Working Groups Leaders scheduled meetings for April and May. Suggestions as to how to proceed</li> <li>• WG 2 feedback on 1<sup>st</sup> meeting: poorly attended</li> <li>• 1st Workshop update: content and participation were very good. 197 participants logged in to participate</li> </ul>

				<ul style="list-style-type: none"> <li>• 2nd Workshop EUSICA + COST: 16 participants will be reimbursed (speakers, abstract presenters)</li> <li>• Communication activities update (social networks): mailchimp is being used for email shots. Twitter to be launched.</li> <li>• Annual Conference: Laura Belver shared the program and reimbursement will be available to 41 participants approximately (local participants also). Higher long distance travel was agreed upon.</li> <li>• First call of STSMs was opened, so far only 1 application</li> </ul>
Core Group Meeting 7	05/05/2023	Virtual	14	<ul style="list-style-type: none"> <li>• The new budget proposal was approved by the MC</li> <li>• Scientific Evaluation from 2<sup>nd</sup> year of Immuno-Model Cost Action: Chair went over the aims and goals</li> <li>• Outcome of meetings and lessons learned shared by WG Leaders</li> <li>• 2nd Workshop EUSICA + COST: feedback from participants was very positive</li> <li>• Update on the program and participants invitations for the Annual Conference. All agreed to reimburse higher travel costs and increase number of participants to be reimbursed</li> <li>• No new applications for STSM grants. WG leaders to spread the work in their WGs</li> <li>• One proposal for summer school discussed.</li> <li>• Denis Collins gave feedback form TGRC questionnaire. WG Leader to push members to answer it</li> </ul>
Core Group Meeting 8	09/06/2023	Virtual	1	<ul style="list-style-type: none"> <li>• Feedback form Annual Conference was very positive, many attendees and organization were very good</li> <li>• Chair went over some aspects to improve in the working organisation of the action <ul style="list-style-type: none"> <li>○ Increase members in TGRCs</li> <li>○ Organise tasks force to work on collecting and integrating data</li> <li>○ Putting together a platform to share data sets with immunotherapy</li> <li>○ Rebeca Sanz Pamplona to be contacted by WG3</li> <li>○ Discussion on how to compile protocols</li> <li>○ Increase networking with societies</li> <li>○ Increase dissemination of grant calls</li> </ul> </li> <li>• Data from questionnaire was presented by TGRCs</li> <li>• Devrim Pesen volunteered to host Training School: organ-on-chip techniques, 20/21/22 September 2023, Turkey</li> <li>• Setting up evaluation committees to streamline process of grant evaluations</li> </ul>



				<ul style="list-style-type: none"> <li>• leaders</li> <li>• Content of the newsletter and update of WG participants in the website</li> <li>• 3rd IMMUNO-model Workshop, Virtual in September</li> </ul>
Core Group Meeting 9	07/07/2023	Virtual	10	<ul style="list-style-type: none"> <li>• Chair explained COST policy regarding veto to Hungarian Institutions, which has affected the SCC and WG5 leader Arpad Szoor. Barbara Breznik was offered the positions</li> <li>• GP1: approval of budget changes and expenditure of remaining funds</li> <li>• CG agreed for in person meeting in September, LOS of 1000 euro, and Bank charges</li> <li>• Update of Training School in Turkey: application period in progress and everything is ready regarding program</li> <li>• CG approved higher long distance travel costs (originally 350 euro)</li> <li>• Update of STSM applications: 4 STSM and 1 ITC. MC encouraged to spread the word</li> <li>• TGRCs: Composition and tasks update</li> <li>• EUSICA/IMMUNO-model summary article on workshop is underway</li> <li>• Book on Protocols: WG 1 contacted publisher Springer, and they are willing to publish a book on</li> <li>• 3rd IMMUNO-model Workshop, Virtual in September: no volunteers to organise it</li> <li>• Last MC meeting (Virtual) in October</li> <li>• Training School in 2024: proposal from WG 3</li> <li>• Annual Conference 2024: WG 3 Leader to Contact Bozena Smolkova who volunteered</li> <li>• Aspects to improve: different ideas were presented by the Vice Chair</li> </ul>
Core Group Meeting 10	26/09/2023	In person in Nijmegen	13	<ul style="list-style-type: none"> <li>• GP 1 activities and budget: why some didn't take place and improvements for next Grant Period (GP2)</li> <li>• Working Groups presentations <ul style="list-style-type: none"> <li>○ WG 1 – Devrim Pesen Okvur</li> <li>○ WG 2 - Emmet Mc Cormack</li> <li>○ WG 3 - Marleen Ansems</li> <li>○ WG 4 – Emanuele Azzoni</li> <li>○ WG 5 – Rosalinda Sorrentino</li> </ul> </li> <li>• TGRCs + SCC + GAC presentations</li> <li>• Identification and discussion of final list of activities &amp; Prepare Draft Work and</li> <li>• Budget Plan for Grant Period 2</li> </ul>

#### 4.2. MC meetings

Name	Date	Virtual/in person	Number of participants	Summary of decisions / relevant issues
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Management Committee Meeting 1	02/11/2022	In person at COST Head Quarters in Brussels	25	<ol style="list-style-type: none"> <li>1. COST presentation</li> <li>2. Action Chair Candidate presentation</li> <li>3. COST Action Café (parallel discussion sessions) and debriefing</li> <li>4. Election of mandatory leadership positions <ol style="list-style-type: none"> <li>a. Election of the Chair and Vice-chair and selection of the Grant Holder (Scientific Representative)</li> <li>b. Agreement on the Action Structure</li> <li>c. Election of other mandatory leadership positions</li> <li>d. Core Group and mandates</li> <li>e. Discussion on Work and Budget Plan</li> </ol> </li> </ol>
Management Committee Meeting 2	01/06/2023	In person at IMMUNO-model Annual Conference in Badalona	19	<ol style="list-style-type: none"> <li>1. Approval of MC1 minutes</li> <li>2. Update on IMMUNO-model: numbers, structure, activities, budget and issues to improve; next year planning: Eva Martinez-Balibrea, Chair</li> <li>3. Report on Communication and dissemination activities, including WG5 update: Arpad Szoor, Science Communications coordinator and WG5 Leader</li> <li>4. Update from the Grant Awarding Coordinator: Grant awarding process, applications, etc: Philippe Bertrand, GA Coordinator (online)</li> <li>5. Update on Working Group Activities: <ol style="list-style-type: none"> <li>a. WG1: Devrim Pesen, WG1 Leader (online)</li> <li>b. WG2: Emmett McCormack, WG2 Co-Leader</li> <li>c. WG3: Marleen Ansems, WG3 Leader</li> <li>d. WG4 activities: Laura Belver, WG4 Leader</li> </ol> </li> </ol>
Management Committee Meeting 3	10/10/2023	Virtual	33	<ol style="list-style-type: none"> <li>1. Approval of MC2 minutes</li> <li>2. Update on IMMUNO-model GP1: numbers, structure, activities, budget and issues to improve: Eva Martinez-Balibrea, Chair and Melanie Giorgi, Grant Holder Manager</li> <li>3. Update from the Grant Awarding Coordinator: Grant awarding process, applications, etc: Philippe Bertrand, GA Coordinator</li> <li>4. Contribution of Management Committee to the Action: Leticia Oliveira-Ferrer, Vice-chair</li> <li>5. Update on Working Group Activities <ol style="list-style-type: none"> <li>a. WG1: Cristiana Tanase, WG1 Co-Leader</li> <li>b. WG2: Johannes Haybaeck, WG2 Leader</li> </ol> </li> </ol>

				<ul style="list-style-type: none"> <li>c. WG3: Marleen Ansems, WG3 Leader</li> <li>d. WG4: Laura Belver, WG4 Leader</li> </ul> <ul style="list-style-type: none"> <li>6. Report on Communication and Dissemination activities, including WG5 update: Barbara Breznik, Science Communications Coordinator and WG5 Leader</li> <li>7. Update on TGRCs: Dennis Collins</li> <li>8. IMMUNO-model Grant Period 2 activities and budget: Eva Martinez-Balibrea, Chair <ul style="list-style-type: none"> <li>a. Annual Conference: Marleen Ansems on behalf of Božena Smolková</li> <li>b. Workshop 1: Igor Stojkovski</li> <li>c. Training School: Rebeca Sanz-Pamplona</li> <li>d. Workshop 2: Dennis Collins</li> </ul> </li> </ul>
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### 4.3. WG meetings

#### 4.3.1 WG1 meetings

*1st Meeting*, online on May 12th, 2023, 47 Participants

Decisions:

- 1) Meeting every 2 – 3 months are necessary and sufficient.
- 2) As the WG1 is a large group of 119 primary members, subgroups should be formed for efficient collaboration and realization of objectives.
- 3) Short scientific presentations can be delivered to foster collaboration.

*2nd Meeting*, hybrid on May 31st, 2023

24 on-site 11 online participants

Decisions:

- 1) A live document (Google Drive Document) will be shared so that members can enter and update information and start forming subgroups.
- 2) For the first year, the outcomes can be review papers, special issue in a journal, book chapters, books.
- 3) The Action website has intranet (members' area) and can be used for file sharing.
- 4) Webinar series can be organized on topics such as protocols, standardization, regulatory issues. Speakers from regulatory agencies can be invited.
- 5) Educational lectures for beginners for example on biomarkers can be organized.
- 6) Grant applications can be carried out jointly with members.
- 7) A training school on microphysical systems will be organized.

*3rd Meeting* was online on October 26th, 2023.

All attendees introduced themselves briefly mentioning their research areas of expertise and interest.

5-minute-long presentations were planned for the next meeting.

Pavla Bojarova, Leticia Oliveira-Ferrer, Giovanni Capranico, Yuval Shaked and Ferran Grau previously expressed interest via email to present on November 30th.

D. Pesen Okvur presented WG1 activities since the start of the Action and showed the intranet area at the Action website.

Common areas of collaboration such as organoids, organ-on-chip models and different cancer types were identified.

Organizing workshops by experts for non-experts was suggested.

Some members cannot access the intranet, referred to WG5 chairs.

Forming subgroups can benefit from sharing the information by participants when they applied to WGs; however, how to handle privacy was not clear – to be resolved.

Results for GP1:

A live document (Google Drive Document) is active. However, feedback is low.

Sweta Rani and Lukasz Skalniak are leading the task force for publishing a lab protocol series *Methods in Molecular Biology*, by Springer Nature.

The Action website intranet is available. But engagement is low.

There is one successful grant application funded by TUBITAK\* – collaboration between Burak Derkus (Turkey) and Bruno Sarmiento (Portugal) with the title: “Investigation of Exosome-Mediated Post-Tumorigenic Mechanisms of Tumor-Associated Macrophages at Colorectal Cancer Model at In vitro and In Vivo Levels”

Training School on microphysical systems was realized with success by coordinator Devrim Pesen Okvur at Izmir Institute of Technology in Turkey, on September 20 – 22, 2023.

#### 4.3.2 WG2 meetings

1<sup>st</sup> Meeting, online on May 16th, 2023

Core group members decided on various activities: 57 online participants

Decisions:

- 1) Meeting every 2 – 3 months will be necessary and sufficient.
- 2) As the WG2 is a large group of many primary members, subgroups should be formed for efficient collaboration and realization of objectives, in particular when writing one or more review articles. Potentially one might also think about an article series in a special issue in a journal or even a book chapters, but at least one review article in a high class journal should be the goal.
- 3) Webinar series might be organized on topics such as protocols, standardization, regulatory issues. Internationally renowned speakers should be invited.
- 4) In the future grant applications can be carried out jointly with members. However, first the group has to show collaborative activities.
- 5) A training school will need many resources and has to be planned very carefully. Thus, this might be postponed to a later phase.

2<sup>nd</sup> Meeting was an abandoned WG2 meeting in Badalona owing to technical difficulties with the auditorium.

### 4.3.3 WG3 meetings

#### *General WG3 Meeting 1: 02-05-2023 (53 participants)*

##### Agenda

1. Introduction WG3 leaders (Marleen Ansems, Maurizio Callari)
2. Aims of IMMUNO-model/WG3
3. Overview of fundable activities and mechanisms of selection
4. Discuss interest in either:
  - host STSM (what would they learn/do?)
  - organize workshops (topics? invited speakers?)
  - organize training school
5. WG organisation

#### *General WG3 Meeting 2: 01-06-2023 (hybrid)*

##### Agenda

1. Introduction by: Dr. Hanne Haslene-Hox
2. Introduction by: Dr. Urška Kamenšek
3. Introduction by: Dr. Burcu Menekşe Balkan
4. Introduction by: Prof. Dr. Pablo Conesa Zamora
5. Inventories/determine taskforces
6. Future activities

#### *General WG3 Meeting 3: 07-09-2023 (53 participants)*

##### Agenda

1. Introduction by: Prof. Dr. Leticia Oliveira-Ferrer
2. Introduction by: Dr. Jozsef Dudas
3. Introduction & tips and tricks to establish a successful COST Action: Prof. Dr. Chiara Riganti
4. Introduction & Annual Conference 2024 in Slovakia: Dr. Bozena Smolková
5. Introduction & Computational taskforce: Dr. Rebeca Sanz-Pamplona (together with Dr. Maurizio Callari)
6. Closing

#### *WG3 kick-off meeting Computational taskforce: 13-09-2023, 11 participants*

##### Agenda

1. Introduction of the initial set of activities of the task force by Dr. Maurizio Callari and Dr. Rebeca Sanz-Pamplona: Springer book chapter, Immunoncology dataset collection, Computational summer school
2. Definition of the timeline of the activities
3. Questions and answers

#### *General WG3 Meeting 4: 13-10-2023, 43 participants*

##### Agenda

1. Welcome and update on IMMUNO-model and WG3, Dr. Marleen Ansems
2. Update Computational taskforce Dr. Maurizio Callari
3. Introduction Dr. Phillipe Bertrand

#### 4. Closing

##### 4.3.4 WG4 meetings

WG4 meeting 1 (virtual): April 20<sup>th</sup> 2023

- Introduction of WG4 leaders and meeting participants.
- Overview of WG4 aims.
- Overview of fundable activities and discussion:
  - Training school proposal – Clinical hemato-oncology for basic researchers.
  - Potential collaboration between WG4 members on a project on exosomes.

WG4 meeting 2 (hybrid): June 1<sup>st</sup> 2023

- Introduction of new WG4 members.
- Follow up on the training school: possible locations and lecturers.
- Proposals for review manuscripts.

WG4 meeting 3 (hybrid): September 8<sup>th</sup> 2023

- Introduction of new WG4 members.
- Discussion:
  - Strategy to gather protocols for the IMMUNO-model database, including *in silico* protocols for data integration and analysis.
  - Task forces: which and how to set them up.
  - Establishment of patient sample sharing tools.
  - Potential publication protocols.
  - Training school: University of Coimbra / University of Porto could host the training school in summer 2025.
- Potential participation in the EBMT-EHA 6<sup>th</sup> European CAR-T cell meeting in Valencia (15-17 February 2024).
- One of the WG members shared his experience as a STSM grantee.
- Call for collaboration from a WG member.

##### 4.3.5 WG5 meetings

Name	Date	Virtual/in person	Number of participants	Summary of decisions / relevant issues
WG5 meeting 1	May3, 2023 1-2 pm CET	Virtual	15	<ul style="list-style-type: none"> <li>• Introduction WG5 leaders (Arpad Szoor, Barbara Breznik)</li> <li>• Introduction of WG participants</li> <li>• Aims of WG5</li> <li>• Discuss interest in either:               <ul style="list-style-type: none"> <li>• Communication strategy</li> <li>• Dissemination strategy</li> </ul> </li> </ul>
WG5 meeting 2	June 1, 2023 1-2 pm CET	Hybrid and in person at Annual	15	<ul style="list-style-type: none"> <li>• Overview of WG5 activities</li> <li>• Dissemination and Communication plan</li> <li>• Webpage and social media platforms</li> </ul>

		Conference in Barcelona		
WG5 meeting 3	October 17, 2023 1-2 pm CET	Virtual	16	<ol style="list-style-type: none"> <li>1) Dissemination and Communication Plan (revision)</li> <li>2) Webpage and social media (revision of platforms and activities, improvements)</li> <li>3) Advertisement of STSMs, Annual Conferences, training schools</li> <li>4) Communication with other scientific/professional/patient associations, industry, clinicians</li> <li>5) Subgroup division to split activities (newsletters, social media engagements, events, communication channels)</li> <li>6) Other, discussion</li> </ol>

## 5. Mobility Grants

An initial budget of 22,050€ was proposed for grant period 1, to support up to 8 Short-term Scientific Mission (STSM) applications. And 3,000€ euro for two Inclusiveness Target Country (ITC) grants and 3,000€ euro for two Dissemination (DC) grants were also defined.

A total of 9 STSM applications were submitted for this grant period.



The first one was cancelled early by the applicant due to a sudden unavailability of one supervisor for the expected dates of the application. This application was postponed for Grant Period 2 (GP2).

Another application was accepted but a problem of visa was raised and the applicant was not able to go at the expected dates of the application. This application will probably be reported for GP 2.

A total of 7 STSM applications were finally gone to completion with successful results. The global budget spent was: 12,280€.

A single ITC application was accepted for a budget of 510 euros.

Below are the applicants, their project with the location where they went, the length of their stay and a summary of the results. ITC application is in blue background.

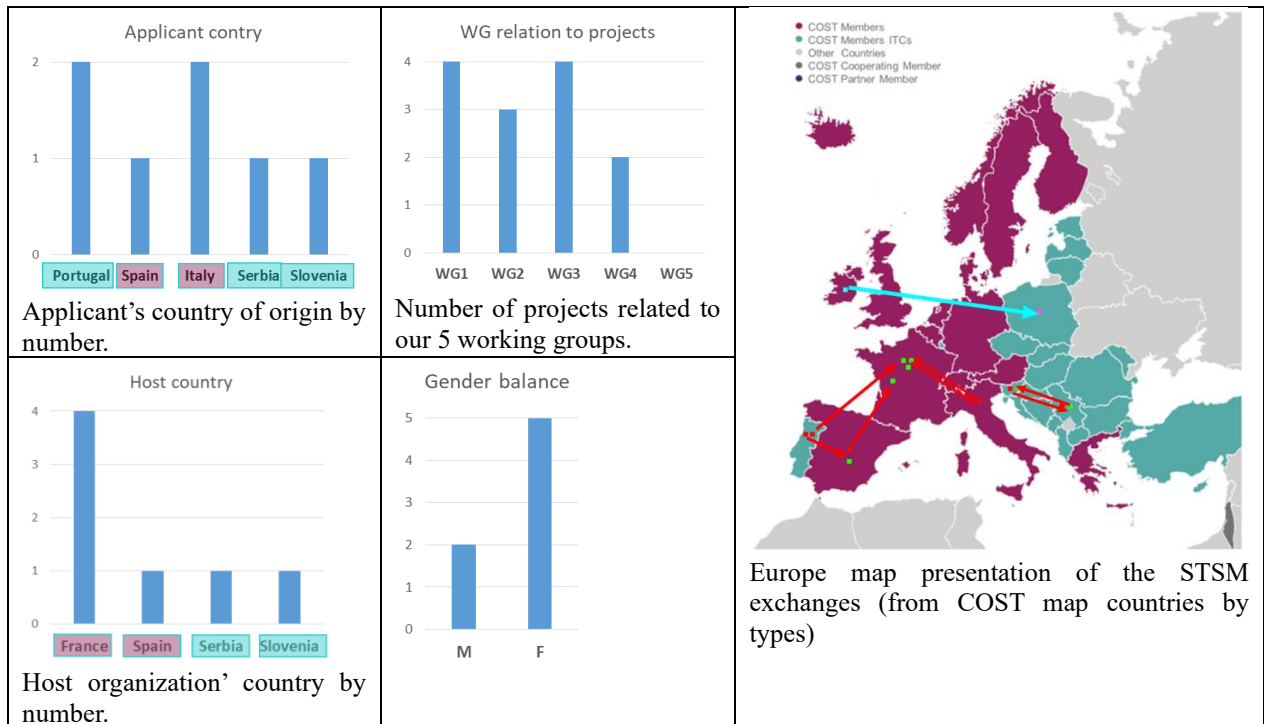
	<p>Emanuele Azzoni, Ph.D</p> <p>Transplantation of fetal-restricted hematopoietic progenitors into new born mice to assess their lineage contribution. Milano -&gt; Paris, 1 week.</p> <p>Results: Transgenic mice embryos (Cdh5-CreER<sup>T2</sup>::R26-EYFP) were produced in a small quantity compared to expected results but an ongoing collaboration is established to continue the project. This STSM also resulted in several exchange of knowledge with meetings/seminars to generate ideas for future collaborations.</p>
	<p>Cristiana Barone, Post doc.</p> <p>Transplantation of fetal-restricted hematopoietic progenitors into new born mice to assess their long-term repopulation ability. Milano -&gt; Paris, 1 week</p> <p>Results: Transgenic mice embryos (Cdh5-CreER<sup>T2</sup>::R26-EYFP) were produced in a small quantity compared to expected results and ongoing collaboration is established to continue the project. The applicant learnt how to make intravenous injection to new born pulp, a specific knowledge from the host institution. The host lab was highly interested by the imaging facilities master at the sending institution for future collaborations.</p>

	<p>Carles Bofill Bonet, 3rd year Ph.D Enhancing local administration of TIMP-3 protein to avoid cell proliferation in cancer. Barcelona -&gt; Angers (FR), 1 month Results: mRNA TIMP-3 (immune response regulator) nanoparticles have been successfully incorporated into the hydrogel/poloxamers without altering their properties such as mRNA releasing capabilities. The particles are internalized by cells where expression of TIMP-3 was lower than expected. Seminars were organized to share results and knowledge.</p>
	<p>Ana Borges, 1st year Ph.D Dissect the tumor microenvironment to battle cancer radioresistance and immune escape Porto -&gt; Paris, 1 month Results: A proof of concept that the modulation of immune-mediated radioresistance could constitute a novel therapeutic strategy for treatment of TNBC was established, using 3D preclinical cancer models. Data on 3D preclinical models were collected to establish open access standardized protocols. Another mission is planned to continue this work.</p>
	<p>Flavia Castro, Ph.D Unveil the therapeutic combination of IFN-gamma and chitosan/poly(<math>\gamma</math>-glutamic acid) nanoparticles for breast cancer treatment. Porto -&gt; Pamplona, 1 month Results: She learn immune-phenotyping technique using an Imaging Systems, to analyse and integrate all the data collected, establish a cross-interdisciplinary international collaboration, and to bring the knowledge at i3s once the same equipment will be operational. A manuscript is in preparation. A seminar was planned at her Institution about the technique learnt. Receiving a PhD student from the host institution is planned as well as a grant application for funding.</p>
	<p>Jelena Grahovac, Ph.D Testing the anti-tumor NK cell activity in patient-derived pancreatic cancer culture in the microfluidic chip device. Belgrade -&gt; Ljubljana, 1 week Results: A proof of principle for microfluidic chip setup suitable for live imaging by confocal microscopy was established and evaluation of infiltration potential and cytotoxicity of engineered NK cells in pancreatic cancer spheroids derived from a patient. In data collection was planned during Dr Perišić Nanut's visit to Serbia to have preliminary findings for a joint funding application</p>
	<p>Milica Nanut, Ph.D Analyzing the expression and main interacting partners of cystatin F in pancreatic ductal adenocarcinoma. Ljubljana -&gt; Belgrade, 1 week Results: Patient tissue material were analyzed and data were obtained on the level of cystatin F mRNA expression, its presence and spatial relations to other target peptidases within the tumour microenvironment as well as its molecular form. The best approach for modulation of cystatin F function will be selected to contribute to get preliminary data necessary for gathering data for a joint grant application. During the stay seminars were organaised.</p>
	<p>Ines Pinto, 1st year Ph.D Nanoparticles for CAR T cell manufacturing: a potential gene delivery platform Coimbra-&gt; EACR conference - Barcelona, Poster Results: The applicant established connections with Dr. Tyler Jacks (MIT, USA, CRISPR-Cas9 technology) for cancer immunotherapies, The Mimetics (Netherlands, startup with 3D culture cancer models). The attendance at the EACR Conference was a crucial step in advancing her career and expertise in cancer immunotherapy and had a positive impact on the IMMUNO-model COST Action by increasing its visibility.</p>

Some statistics for mobility grants

Purple: COST member countries; Blue: ITC countries





## 6. Dissemination and Communication Activities

### 6.1. Webpage and logo

The IMMUNO-model webpage and logo was established- <https://www.immuno-model.eu/>. The website will be active for the duration of the Action and a further two additional years. The website is updated regularly by WG5, the Action Leader and Boutik. The webpage contains all relevant information and news for CA members and other visitors of webpage.

### 6.2. Social media platforms

Social media platforms have been established and are updated by WG5:

- LinkedIn: <https://www.linkedin.com/company/cost-action-ca21135-immuno-model/?viewAsMember=true>, more than 45 followers
- X (ex Twitter: <https://twitter.com/immunomodel>), 82 followers

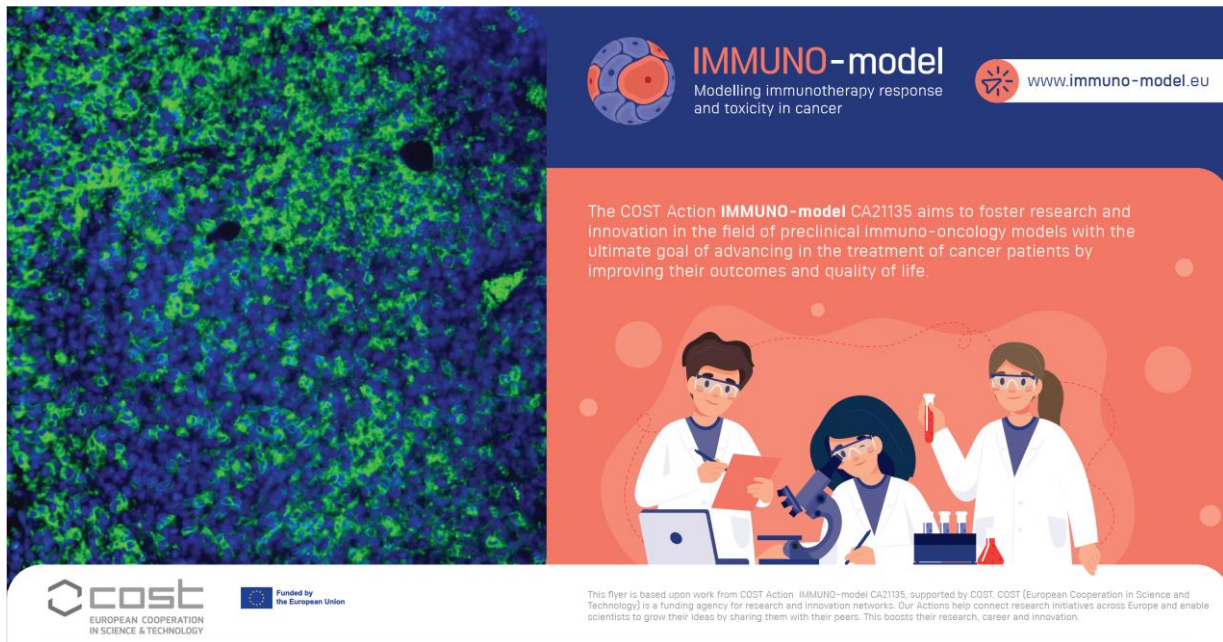
### 6.3. Scientific publications


1. Colarusso C, Falanga A, Terlizzi M, De Rosa I, Somma P, Sommella EM, Caponigro V, Panico L, Salviati E, Campiglia P, Salatiello G, Tramontano T, Maiolino P, Pinto A, **Sorrentino R\***. High levels of PD-L1 on platelets of NSCLC patients contributes to the pharmacological activity of Atezolizumab. *Biomedicine&Pharmacoterapy*. 168, 2023, 115709. <https://doi.org/10.1016/j.biopha.2023.115709>.
2. Colarusso C, Terlizzi M, Falanga A, Stathopoulos G, De Lucia L, Hansbro P, Pinto A, **Sorrentino R\***. Absent in melanoma 2 (AIM2) positive profile identifies a poor prognosis of lung adenocarcinoma patients. *International Immunopharmacology*. Volume 124, Part B, 2023, 110990. <https://doi.org/10.1016/j.intimp.2023.110990>.

3. Hermsen MA, Lechner M, Oliveira Ferrer L, Trama A, Eriksen PRG, Martinez-Balibrea E, von Buchwald C. EUSICA/COST IMMUNO-model workshop fostering collaboration to advance sinonasal cancer research: A meeting report. *Oral Oncol.* 2023 Nov;146:106543. doi: 10.1016/j.oraloncology.2023.106543. Epub 2023 Aug 11. PMID: 37573683.

#### 6.4 Promotional materials

- Various Flyers for the dissemination of IMMUNO-model and for grants calls  
<https://www.immuno-model.eu/newss/immuno-model-flyers-are-out/>





**IMMUNO-model**  
Modelling immunotherapy response and toxicity in cancer

Are you working with pre-clinical models in the field of immunotherapy and cancer research and would like to gain scientific experience abroad?


**Call for Mobility Grants for Researchers and Innovators such as Short-Term Scientific Missions (STSM), as well as Inclusiveness Target Country (ITC) and Dissemination Conference Grants**


**Applications are **NOW OPEN!****

*in the scope of IMMUNO-model COST Action CA21135*

**About IMMUNO-model**

The COST Action IMMUNO-model CA21135 aims to foster research and innovation in the field of preclinical immuno-oncology models with the ultimate goal of advancing in the treatment of cancer patients by improving their outcomes and quality of life.


 [www.immuno-model.eu](http://www.immuno-model.eu)



**How to Apply**



- Become a Member of IMMUNO-model - [www.immuno-model.eu](http://www.immuno-model.eu)
- Instructions to Apply - [www.immuno-model.eu/activities/stsms](http://www.immuno-model.eu/activities/stsms)



This flyer is based upon work from COST Action IMMUNO-model CA21135, supported by COST. COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.




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 **IMMUNO-model Website**  
 [www.immuno-model.eu](http://www.immuno-model.eu)

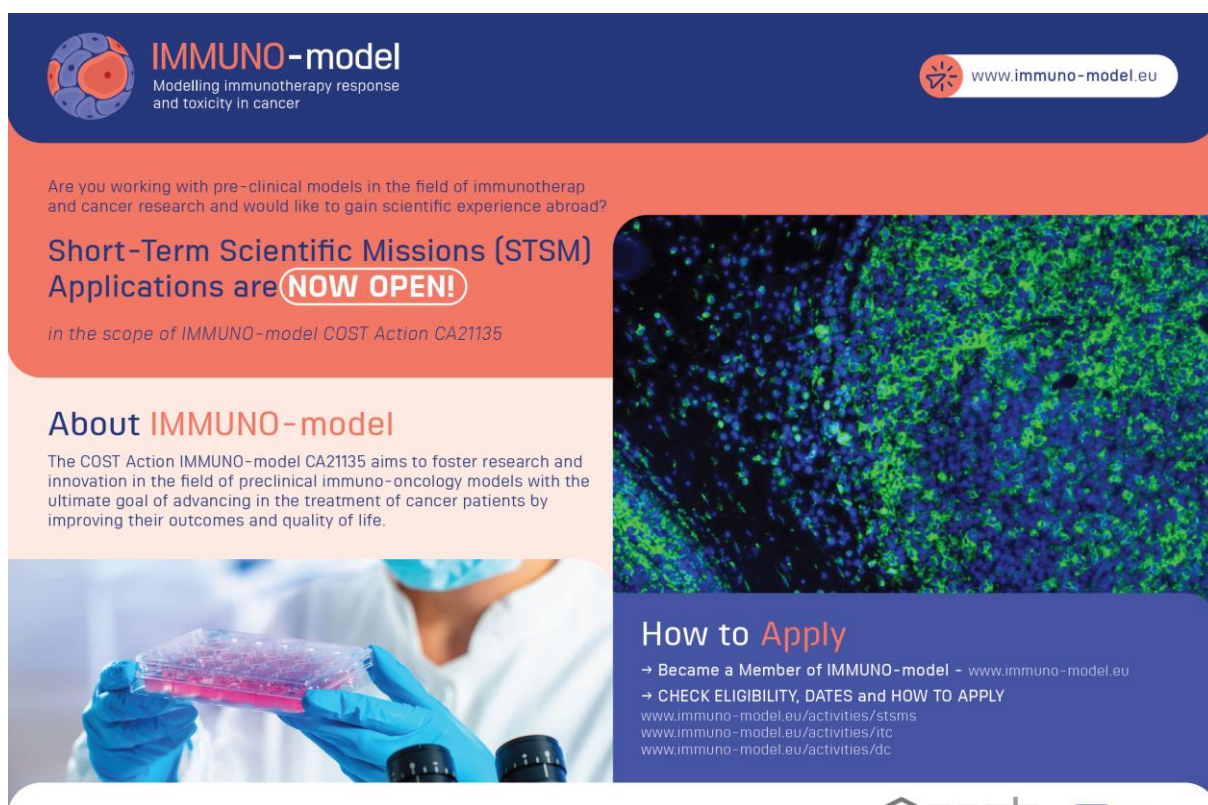
  **Follow us on social media**

- **LinkedIn** @IMMUNO-model COST ACTION
- **X (former Twitter)** @immunomodel



This flyer is based upon work from COST Action IMMUNO-model CA21135, supported by COST. COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.





The flyer features a dark blue header with the IMMUNO-model logo and tagline. Below this, a red banner contains the text 'Are you working with pre-clinical models in the field of immunotherapy and cancer research and would like to gain scientific experience abroad?' followed by 'Short-Term Scientific Missions (STSM) Applications are NOW OPEN!' and 'in the scope of IMMUNO-model COST Action CA21135'. The main body is white with a section titled 'About IMMUNO-model' and a photograph of a scientist in a lab coat and gloves holding a petri dish. To the right is a large image of a cell culture with green and blue fluorescence. A dark blue footer contains 'How to Apply' instructions and logos for COST and the European Union.

**IMMUNO-model**  
Modelling immunotherapy response and toxicity in cancer

www.immuno-model.eu

Are you working with pre-clinical models in the field of immunotherapy and cancer research and would like to gain scientific experience abroad?

**Short-Term Scientific Missions (STSM) Applications are NOW OPEN!**

*in the scope of IMMUNO-model COST Action CA21135*

**About IMMUNO-model**

The COST Action IMMUNO-model CA21135 aims to foster research and innovation in the field of preclinical immuno-oncology models with the ultimate goal of advancing in the treatment of cancer patients by improving their outcomes and quality of life.

**How to Apply**

→ Became a Member of IMMUNO-model - [www.immuno-model.eu](http://www.immuno-model.eu)  
→ CHECK ELIGIBILITY, DATES and HOW TO APPLY  
[www.immuno-model.eu/activities/stsms](http://www.immuno-model.eu/activities/stsms)  
[www.immuno-model.eu/activities/itc](http://www.immuno-model.eu/activities/itc)  
[www.immuno-model.eu/activities/dc](http://www.immuno-model.eu/activities/dc)

This flyer is based upon work from COST Action IMMUNO-model CA21135, supported by COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

**cost**  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY

Funded by the European Union

- Power Point Template



The template features the IMMUNO-model logo and tagline in the top left. The main area is white with a large blue text box for the title and a smaller red text box for the subtitle. The background is a light blue and pink abstract graphic of cells. The footer contains the IMMUNO-model COST Action CA21135 logo, the COST logo, and the European Union logo.

**IMMUNO-model**  
Modelling immunotherapy response and toxicity in cancer

**Insert Title Here**

Insert Subtitle Here

IMMUNO-model COST Action CA21135

**cost**  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY

Funded by the European Union

- Promotional video: Discover how preclinical models will boost immunotherapy for cancer:  
<https://www.youtube.com/watch?v=0MQV8FZiQ-A>
- Animated Video: Discover how preclinical models will boost immunotherapy for cancer:

<https://www.youtube.com/watch?v=0bIaNeKy0vQ&t=2s>

## **7. Target Group Recruitment Committees (TGRCs) activities**

The leaders of the three TGRCs were nominated and elected after the kick-off meeting: Denis Collins (TGRC2) and Hanne Haslene-Hox (TGRC3) were approved in December 2022, and Gianmarco Contino (TGRC1) was approved in February 2023.

The goals of the TGRCs are to promote the participation in IMMUNO-model of young researchers, women, and investigators from Inclusiveness Target Countries (ITCs). Furthermore, to supervise the recruitment of new members, as well as ensure equal representation and opportunity of all Target Groups in Action activities and disseminating IMMUNO-model COST Action activities.

During GPI, the TGRCs have provided:

### A Diversity and Inclusion and Anti-Harassment statement:

Denis Collins (TGRC2 lead) prepared a Diversity, Inclusion and Anti-Harassment statement that was reviewed and approved by the Core Working group in March 2023. This policy is now available on the IMMUNO-model website: <https://www.immuno-model.eu/news/immuno-model-inclusion-diversity-anti-harassment-statements/>

### Presentation of IMMUNO-model at conferences:

- Hanne Haslene-Hox, Szöör Árpád, Emmet Mc Cormack, Eva Martinez Balibrea, on behalf of COST Action IMMUNO-model members (2023) *IMMUNO-model: Coming together to model immunotherapy response and toxicity in cancer*; Norwegian Bioscience Society Annual Conference, January 2023, Storefjell, Norway

### 1-to-1-communication with potential members.

Especially industry is dependent on direct dialogue to enable recruitment. There have been arranged a number of personal meetings with relevant companies, to provide them with information about the Action, and motivating them to apply as members. Meetings have been done by TGRC in close collaboration with relevant WG-leaders.

Immunology and Cancer research societies in countries not represented in the Action at present have been contacted, with the aim to recruit members from more countries. This have led to more countries applying for membership, e.g. including Iceland and Finland.

### Meetings:

- The TGRCs have had two meetings (June and September) to follow up on TGRC strategy and metrics. Minutes are available on the shared IMMUNO-model intranet.
- The TGRC have presented updates in the Core Group and Management committee meetings. Presentations are included in the IMMUNO-model CG and MC meeting minutes.

### Monitoring of status and metrics for the Action

To enable equal representation in the Action for all group, it is necessary to know the affiliations and representations in the current memberships. The membership lists have been reviewed to identify gender and country origin of all members. In addition, two surveys have been conducted to collect more detailed information about the members.

- 1) The TGRC leads contributed to the design of the first survey associated with COST Action members circulated in June 2023. This provided data/information on ~112 COST Action members. This information was reviewed for age, gender, ITC and industry/clinical/pre-clinical breakdowns by the TGRC Committee. In summary, 39% of IMMUNO-model members fit the young researcher category, 59% identified as she/her, 40% identified as he/his and 1% returned as “Preferred not to say”. 33% of members came from a COST member country, 65% from a COST member ITC and 2% from non-COST member countries. 12.5% of IMMUNO-model members categorised as clinicians, 78% as pre-clinical researchers, and 9% as bioinformaticians. 4.5% of IMMUNO-model members are associated closely with industry.
- 2) A second survey was designed by the TGRC Committee to gather more specific data on the industry engagement, clinical/translational research and pre-clinical member profiles and expectations of IMMUNO-model. This was circulated to all COST Action members in August/September 2023. Information from the survey was presented at the Management Committee-meeting in September. In brief: 85 members responded to a survey about industrial and clinical affiliations. Out of these, 10% of responders report an affiliation to a SME. At current 10 different SMEs are identified as represented in the Action. 17% of respondents were clinicians, with 68% fitting the description “clinically-orientated researcher”. A broad range of cancer types are under investigation by IMMUNO-model respondents, with Breast, Haematological, Brain/CNS, Colorectal and Lung making up the top 5. Respondents identified better functional models, IO resistance and biomarkers as the top 3 priorities for the IMMUNO-model COST Action. 39% of respondents have samples that they require a pre-clinical team to work on.

### Recruitment of TGRC members

A call for additional TGRC members was circulated by WG leaders to all IMMUNO-model COST Action members in October 2023. The TGRCs are looking for new members to assist with IMMUNO-model recruitment, strategy, dissemination of activities, outreach and equality/diversity/inclusion initiatives in each of the defined committee areas. CVs and letters of motivation were requested to be sent to the relevant TGRC lead for assessment.

### TGRC training/workshop event proposal

A proposal for a TGRC training event to be held in Dublin in September 2024 has been submitted for approval to the COST Action MC.

## **8. Summary and directions for GP2**

For the second Grant Period several activities are planned along the lines of those that took place in Grant Period 1. It should be noted that this Annual Conference, which will be organized

in Slovakia, will be more focused on the actual work done by the participants of the different Working Groups. This will undoubtedly contribute to the achievement of the scientific objectives of the IMMUNO-model Action. One of these objectives is the development of a database on the research groups that are carrying out experiments with pre-clinical models of immuno-oncology. The idea is that some of the attendees of the Training School will be in charge of this database. The Training School will be organized in Zaragoza and will focus on the analysis of bioinformatics data, focusing on the immunological aspects of cancer. In addition, 4 or 5 webinars are planned on crucial topics that will be recorded and made available to anyone who is interested.

Importantly, the frequency of Working Group meetings will be increased, which are expected to result not only in new proposals for activities, but also in new collaborations among participants as well as joint publications.

Details of all the planned activities for Grant Period 2 are listed below:

- Workshop 1, Skopje: 14-15 March 2024 (20 participants to be reimbursed)
- Annual Conference, Bratislava: 6-7 May 2024 (50 participants to be reimbursed)
- Training School, Zaragoza: 11-13 June 2024 (3 trainers + 15 trainees)
- Workshop 2, Dublin: 31/08/2024 (20 participants to be reimbursed)
- 5 webinars and their production
- 11 Core Group Meetings, 1 in person at the Annual Conference
- 2 Virtual Management Committee Meetings
- Grants for STSMs, ITC and Dissemination Conference
- A scientific publication in Open Access
- Website Maintenance and setting up YouTube channel
- Launching Newsletters
- Consumables for training school
- Rental of equipment and short-term use of software and database licenses for Training School
- Zoom license for meetings and webinars
- Bank charges

## Budget

	<b>Description</b>	<b>Budget</b>	<b>LOS</b>	<b>TOTAL</b>
<b>Meetings (Workshops, CG, MC, AC)</b>	Workshop 1, N. Macedonia 14-15 March 2024	19.460,00	4.000,00	23.460,00
	Workshop 2, Ireland 31/08/2024	16.440,00	2.000,00	18.440,00
	Annual Conference Hybrid, Slovakia May 2024	48.350,00	6.000,00	54.350,00
	MC1 Virtual 06/06/2024			
	MC2 Virtual 27/09/2024	0,00	0,00	0,00
	CG meetings x 11	0,00	0,00	0,00
	Webinars x 5	0,00	0,00	0,00
<b>Training Schools</b>	Training School 1 WG3, Spain 11-13 June 2024	21.024,00	3.500,00	24.524,00

<b>Mobility of Researchers and Innovators</b>	STSM	19.000,00	0,00	19.000,00
	VM	0,00		0,00
<b>Presentation at Conferences organised by Third Parties</b>	ITC Conference	3.000,00	0,00	3.000,00
	Dissemination Conference	3.000,00	0,00	3.000,00
<b>Dissemination and Communication Products</b>	Scientific publication in Open Access	5.200,00	0,00	5.200,00
	Website Maintenance	1.500,00	0,00	1.500,00
	Production of 5 webinars	2.500,00		500,00
<b>Other Expenses Related to Scientific Activities (OERSA)</b>	Consumables for training school	500,00	0,00	500,00
	Rental of equipment and short-term use of software and database licenses for Training School	500,00	0,00	500,00
	Zoom license	500,00		500,00
	Bank charges	1.200,00	0,00	1.200,00
<b>Total</b>				<b>155.674,00</b>
<b>FSAC 15%</b>				<b>23.351,10</b>
<b>Grand Total</b>				<b>179.025,10</b>