

COST Action CA17140
Cancer Nanomedicine – from the bench to the bedside
5th CA17140 Management Committee Online Meeting

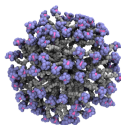
October 31st, 2022, 9:30 am – 1:00 pm

Minutes

MC meeting participants:

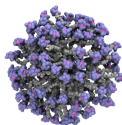
1. Sabrina Pricl – Action Chair
2. Maria Francesca Ottaviani – Grant Awarding Coordinator, MC Member (IT)
3. Ivana Vinković Vrček – WG2 Leader, MC member (HR)
4. Maria Stefania Antica – MC member (HR)
5. Tomas Strasak – WG1 Vice Leader (CZ)
6. Ulf D. Kahlert – WG3 Vice Leader (DE)
7. Enrico Catalano – WG4 Vice Leader (IT)
8. Barbara Klajnert-Maculewicz – Grant Holder Scientific Representative, MC member (PL)
9. Joanna Korczynska – Grant Holder Manager (PL)
10. Ivaylo Dimitrov – MC member (BG)
11. Dominika Wrobel – MC member (CZ)
12. Cecile Arbez-Gindre – MC member (EL)
13. Valentín Cena – MC member (ES)
14. Yrr Mørch – MC member (NO)
15. Carla Cruz – MC member (PT)
16. Helena Maria Pires Gaspar Tomas (PT)
17. Sanda Boca-Farcau – MC member (RO)
18. Monika Sramkova – MC member (SK)

1. The Action Chair, Prof. Sabrina Pricl, welcomed all participants and requested participant quorum verification.
2. The Grant Holder Manager, Mrs. Joanna Korczynska, verified required quorum (presence of 2/3 of the represented COST Countries) and did not confirm the quorum attainment. However, since no MC voting was foreseen during the MC Meeting, the meeting was continued.
3. The Action Chair requested the assembly to:
 - a. give consent to record the meeting, to make the recording available on the Action website and available to all action members. The MC unanimous response was: consented.
 - b. adopt the Meeting Agenda. The MC unanimous response was: adopted.
 - c. approve the 4th MC meeting minutes. The MC unanimous response was: adopted.
 - d. report/discuss any matters arising from last meeting. The MC unanimous response was: nothing to report/discuss.
4. Update from the CA17140 Chair. The Action Chair gave a brief update about the state of the Action and summarized the Action progress with respect to the following aspects:
 - a. Implementation of COST policies. The Action Chair recalled the COST's main elements for inclusiveness and for excellence. Concerning the former, the Action Chair recalled that the Action achieved all three key goals (gender balance, career stage: involving young researchers, and



geographical spread). In particular, the Chair has highlighted the responsibility role assigned to several young researchers, including WG vice-leader positions and as members of the organizing/scientific committee of events organized within CA17140. On the excellence perspective (identifying excellence in science and technology across Europe, increasing research communities' access to funding and infrastructures, and triggering structural changes in Members' national research systems), the Action Chair was again not in the position to show updated information. In particular, she lamented the fact that, as already recalled in the previous MC meeting, only 33% of MC members and 24% of the Action members provided the relevant information by compiling the *ad hoc* prepared Action questionnaire, and required the MC members to comply with this Action critical activity as soon as possible.

5. Update from the Grant Holder Manager: Action Budget Status. The Chair illustrated in detail the previous GBP4 budget and gave a detailed view of the current GP4 budget plan. No critical issues and/or under/overspending were noted and all the budget items were in line with the expenditures foreseen.
6. Update from the Grant Awarding Coordinator (formerly STSM Coordinator): The Chair reported that the program has come to an end, and summarized the relevant activities, which included a total of 95 granted STSMs and three ITC grant awards assigned to young ITC scientists to attend international conferences and thereby present Action-related results. She also informed that the 2nd STSM Conference was being organized by the Grant Awarding Coordinator, Prof. Maria Francesca Ottaviani. The event will take place online on March 23, 2023, and will involve young researchers both in the organizing/scientific committee and as session chairs.
7. The Action Chair, Prof. Sabrina Pricl, informed the MC assembly about the necessity of voting to formally appoint Dr. Maria Eugenia Riveiro as the new Science Communicator Coordinator, following the resignation of Prof. Sabrina Pricl from this role. She then issued the voting process by tacit consent. The MC unanimous response was: approved.
8. Follow-up of MoU objectives: progress report from working groups
 - a. Update from WG1 – The Chair reported that all main activities concerning WG1 were presented during the 4th MC meeting, the corresponding deliverables are available at <https://www.nano2clinic.eu/wg1-deliverables>, and that the relevant scientific activity is still ongoing.
 - b. Update from WG2 – The Chair reported that all main activities concerning WG2 were presented during the 4th MC meeting, the corresponding deliverables are available at <https://www.nano2clinic.eu/wg2-deliverables>, and that the relevant scientific activity is still ongoing. She also informed that the two book-project, in collaboration with the Horizon 2020 projects Phoenix “Open Innovation Test Bed for Enabling Nano-pharmaceutical Innovative Products” (No. 953110, <https://www.phoenix-oitb.eu/>) and RiskGone “Science-based Risk Governance of Nano-technology” (No. 814425, <https://riskgone.wp.nilu.no/>), has been accepted by the Books Editorial of the Royal Society of Chemistry, for the Nanoscience & Nanotechnology Series (edited by Prof Nguyễn T K Thanh, University College London, UK). Specifically, the first book entitled “Physicochemical characterization of nanopharmaceuticals” will be edited by the WG2 leader Ivana Vinkovic Vrcek, the Action member Jesus M. de la Fuente, and the Action Vice-chair Nazende Gunday-Tureli, while the second book entitled “Characterization of drug nanocarriers” will be edited by the WG2 leader Ivana Vinkovic Vrcek, the Action member Jesus M. de la Fuente, and the WG2 Vice-leader Evgeny Apartsin. The delivery of the complete typescript of the Books to the RSC is 1st October 2023.
 - c. Update from WG3 – The Chair informed about the activities performed in WG3 according to the WBP4. Specifically, she briefly reported on the WG3 meeting organized by the WG3 leader Prof. Carlo V. Catapano and held in Bellinzona (CH) on March 24-25, 2022. The meeting was a very alive face-to-face event with the participation of 24 attendees. The program of the event and all the presentation proffered at the meeting are available on the CA17140 website at: <https://www.nano2clinic.eu/wg3-meeting-bellinzona-ch>. The second WG3 event was the 2-day

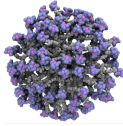


face-to-face workshop “Advancing cancer nanomedicine to the clinic: hopes, hopes and hurdles”, organized by the WG3 Vice-chair Prof. Ulf Kahlert in Magdeburg (DE) on June 16-17, 2022. The workshop was attended by 36 participant and stirred a lot of discussions and new ideas. The program of the event and all the presentation proffered at the meeting are available on the CA17140 website at: <https://www.nano2clinic.eu/wg3-workshop-magdeburg-de>. Next the Chair recalled that WG3 needs to prepare and deploy two deliverables: D3.1. Consensus protocols for in vitro testing of nanomaterials and D3.2. Consensus protocols for in vivo testing of nanomaterials (efficacy, toxicology, and pharmacokinetic studies). The Chair then briefly illustrated the expected content of these two deliverables and reminded the deadline of January 2023 for the upload of the documents on the Action website.

- d. Update from WG4 – The Chair summarized the activities performed in WG4, focusing on the two main events of the period. Firstly, she highlighted the highly-popular 3rd “Meet our industrial partners webinar series event, which was held on Friday 08/7/2022, for which the program and the recordings of the event are available on the Action website at: <https://www.nano2clinic.eu/third-industrial-partners-workshop-series>. Next, she summarized the second popular event, that is the online webinar “PK/PD relationships of anticancer agents: Could nanoparticles change the game?” offered by Prof. Joseph Ciccolini on Thursday 21 April 2022. The recordings of this event is also publicly available on the Action website at: <https://www.nano2clinic.eu/webinar-recording>. Finally, the Chair WG4 reported that the WG4 Group meeting – to be hosted/organized by WG1/WG4 in Istanbul (TR) for WG4 deliverable preparation – was cancelled for poor adhesion. The CG decided to take on responsibility for the preparation of the deliverables via online meetings. She recalled that this WG is expected to prepare two deliverables: D4.1. Formulation of guidelines and documents for translation of nanomedicines from bench to bed/market, and D4.2. Formulation of guidelines and documents concerning regulatory aspects of nanomedicines, with planned deployment date by December 2022.
- e. Update from the final CA17140 Conference. The Chair updated the MC about the final CA17140 Conference, that was held in a hybrid (face-to-face + online) form in Rome (IT), on October 25-26, 2022. The program was composed by 10 keynote speakers, 15 in person oral communications, 5 remote oral communications from different EU Countries and beyond, including BE, CZ, DK, NO, AT, FR, SE, UK, IE, CH, RO, HR, IT, EL, AUS, SK, PT, DE, IL, and LV. The program was a blend of academic, industrial and YR/I contributions, with a very good participation, specifically: DAY 1: 32 in person and 74 from remote (106 overall), and DAY 2: 31 in person and 69 from remote (100 overall), with additional in-person participation by scientists from Italy. The Chair however stigmatized the fact that less than 50% of MC attended the event. The Conference program, book of abstracts and slides of all presentations (pdf) are available on the Action website dedicated page: <https://www.nano2clinic.eu/ca17140-final-conference>.

9. Scientific planning.

- a. Scientific strategy (MoU objectives, GP Goals, WG tasks and deliverables). The Action Chair recalled the Action Primary and Secondary Objectives, the 4th GP goals, and the 4th GP Deliverables and milestones. She also highlighted the POs and SOs still required efforts from the Action, mainly: 1) Promoting and fostering active and multidisciplinary collaborations between industry and academia on each aspect of the design, development, and translation of cancer nanomedical agents; 2) Fostering synergies between complementary EU groups of excellence, thereby expanding the network beyond existing collaborations between Action partners, with particular attention to the strong, active involvement of SMEs, regulatory agencies, academic clinical research centers, clinical research organizations, and other public/industrial entities; 3) Disseminating results to all potential stakeholders, including public organisms, funding agencies, patient associations and the general public to increase EU citizen awareness of the social benefits

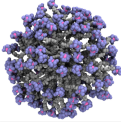


- of the Action results; and 4) Creating strong partnership between academia and industry by the equal participation of these two groups.
- b. Action budget planning (including anticipated locations and dates of future activities). The Action Chair, Prof. Sabrina Pricl, informed the MC that WBP4 is the last budget period of the Action. However, as the MC was informed, the Chair prepared and submitted a request for a 6-month Action extension with the purpose of:
- i. Reaching the complete achievement of the CA17140 MoU research coordination objectives: Research Coordination Objective #2: Fostering synergies between complementary EU groups of excellence, thereby expanding the network beyond existing collaborations between Action partners, with particular attention to the strong, active involvement of SMEs, regulatory agencies, academic clinical research centers, clinical research organizations, and other public/industrial entities; Research Coordination Objective #4: Disseminating results to all potential stakeholders, including public organisms, funding agencies, patient associations and the general public to increase EU citizen awareness of the social benefits of the Action results.
 - ii. Regaining and empowering networking and training activity
 - iii. Redesigning the 2nd CA17140 Training School

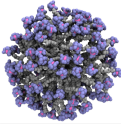
The Chair then informed the MCs that the COST Offices approved the 6-month Action extension and set the new CA17140 deadline by March 27, 2023. Concomitantly, the COST Offices also granted an additional financial support of **70,625.00 EUR** to be managed in the new WBP5, lasting from November 1, 2022, to March 27, 2023. The Chair informed that the WBP5 Activities discussed and proposed by the CG were approved by the SO, the COST offices and unanimously by all MC board via e-voting.

Long term planning. The Action Chair, Prof. Sabrina Pricl, gave a detailed information of all activities foreseen during the 5th and last Action GP. In particular, she presented the 12 goals of the 5th GP, and reported in detail the foreseen activities, as follows:

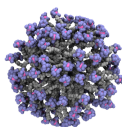
1. 2nd STSM Conference (related to GAPG 3,4,5,6,7,8,10 and 11), to be held online on 2023-02-23 from 9 am to 2023-02-23 6:30 pm (1 day). Main organizer: Prof. Maria Francesca Ottaviani (Grant Awarding Coordinator). Organizing and Scientific Committee: composed by Young Researchers/Innovators, appointed by Prof. Ottaviani in response to a call issued among this class of STSM grantees. Budget: 1000 EUR (LOS). Aims and scope: Disseminating to the widest possible public the results (both in terms of scientific production, networking, jointed proposals, etc.) originated through STSM grants. The Chair recalled that this second STSM conference is instrumental to also include those grantees whose activity was carried out starting September 2022, and that all these grantees were requested to present their contribution to this event. The number of expected total participants was set to 200 and the relevant outputs consist in the Official Action book of abstracts + recorded presentations (upon granted permissions) edited and hosted on the action website and made publicly available.
2. 6th (and last) MC meeting (related to GAPG 12), to be held online on 2023-03-23 from 9 am to 2023-03-23 1 pm to ensure the widest participation. No budget is foreseen for this event. The purpose of the meeting is to update the MC about all major goals achieved by the Action during its overall time scale. All events and initiatives concerning all WGs and all WG goals will be presented and discussed. The results of correction actions eventually enforced since the previous MC meeting will also be presented and discussed as well. A global overview of the Action Budget distribution will be offered. Each WG leader will briefly highlight the WG activity, goals, and milestones. The STSM coordinator will report on the STSM results and achievements. The chance of shaping a future COST Action and/or other jointed initiatives will also be proposed and discussed.



3. COST Actions jointed meeting (related to GAPG 3,4,5,6,7,8,10 and 11). This 1-day online event, organized by the Action Chair, CG members and GH Manager, will be held on 2022-12-15 from 9 am to 2022-12-15 6 pm with a budget of 1000 EUR (LOS). Concerning the aims and scopes of the event, the Chair recalled that on October 2022, several new COST Actions dealing with different aspects of cancer therapeutics will start their activity while a few other will continue and terminate their work concomitantly with CA17140. (e.g., IC17104; CA21135; CA21154, and CA20140. In this respect, the CG believe that having a virtual meeting among representatives of our CA17140 and of these new/ongoing Actions will not only create a synergism between all these initiatives focused on a common mainline but will also serve as a fundamental tool to create further networking contacts and will result in a major think-tank on all different critical issues in nanomedicine development. The expected outputs of the event are based on common definitions of hopes and hurdles in developing cancer (nano)therapeutics; the development of common roadmaps for the development and the translational aspects of cancer(nano)medicines; the dissemination of non-confidential Action results to a wider audience of experts in the field; and further development and/or foster networking activity; generation of a new, enlarged think-tank on cancer nanomedicine development.
4. Women and minorities in cancer nanomedicine (related to GAPG 3,4,5,6, 8 and 10). This 1-day online event, organized by the Action Chair, CG members and GH Manager, will be held on 2022-12-15 from 9 am to 2022-12-15 6 pm with a budget of 1000 EUR (LOS). Concerning the aims and scopes of the event, the Chair reported that gender and minority disparity in cancer nanomedicine is a serious problem that is likely to persist in the absence of a frank and open dialogue leading to effective action. Accordingly, the CG decided to host a panel discussion on "Women and minorities in cancer nanomedicine" during which a substantial number of representatives will share their scientific career choices and experiences along with their perspectives on how every scientist must take equal responsibility in avoiding any gender/minority discrimination in research. During the meeting, the participants will further discuss some of the difficulties underlying gender issues in cancer research and science in general, and present to the attendees the way in which our CA17140 COST Action has contributed to supporting gender and minority balance in cancer nanomedicine. In terms of expected outputs, this initiative has the purpose to generate a pan-European COST-based working group to assess the current roles and involvement of women and minorities in cancer nanomedicine, and the results of this first working group will be published in a position paper. Contextually, the Chair informed about the opening of the relevant call for contributions at: cost_action_17140@icloud.com.
5. CA17140 2nd Training School (related to GAPG 1 and 2) entitled 2nd CA17140 Training School on in vitro/in vivo and translational aspects of cancer nanomedicines. This face-to-face 2-days event will be organized by the WG3 leader Prof. Carlo V. Catapano and held at the Institute for Oncology Research (Bellinzona, CH) from 2023-03-13 at 9 am to 2023-03-14 at 6 pm. The foreseen budget for the event is 38100 EUR (34100 + 4000 LOS), with a total number of expected participants of 7 trainers and 24 trainees (all to be reimbursed by COST). Concerning the aims and goals of this event, the Chair recalled that, following the cancellation of the former 2nd CA17140 Training School (TS) due to the Ukraine/Russia conflict, this fundamental event will bring together researchers from different disciplines to learn about the most recent in vitro/in vivo/ regulatory and translational aspects of cancer nanomedicine. It will be a perfect platform to share experience and foster collaborations. All lectures will be complemented by practical information and advisory; comprehensive talks, special sessions, debates, and new perspective for future scientific cooperation. The expected outputs of this events are: increasing awareness of in vitro/in



- vivo activity and toxicity of nanomedicines among Young Researchers/Innovators (YR/I); increasing knowledge about nanomedical applications in cancer treatment among YR/I; exchanging expertise and transferring knowledge on nanomedicine between participants; increasing interdisciplinarity expertise of YR/I and senior scientists; and cross-pollination of knowledge on cancer nanomedicine.
6. The CA17140 stakeholder event (related to GAPG 3,4,5,6, 8,9 and 11). This face-to-face 1-day event will be organized by Prof. Ivana Vinkovic Vrcek at the Institute for Medical Research and Occupational Health (Zagreb, HR, ITC) on 2023-03-03 from 9 am to 2023-03-03 6. The allocated budget is 15000 EUR (14000 + 1000 LOS). The Chair highlighted that this 1-day core in person event of the WBP5 has been conceived to fulfill two of the fundamental promises of CA17140, that are: Research Coordination Objective #2: fostering synergies between complementary EU groups of excellence, thereby expanding the network beyond existing collaborations between Action partners, with particular attention to the strong, active involvement of SMEs, regulatory agencies, academic clinical research centers, clinical research organizations, and other public/industrial entities; and Research Coordination Objective #4: disseminating results to all potential stakeholders, including public organisms, funding agencies, patient associations and the general public to increase EU citizen awareness of the social benefits of the Action results. The Chair and the CG foreseen the participation of 3 members of CA17140 - to act as moderators and to record all the event minutes - and of 11 representatives belonging to the different targeting group: SMEs, regulatory agencies, academic clinical research centers, clinical research organizations, and other public/industrial entities and patients' associations. The major aims of this meeting is to inform these stakeholders of all progress achieved within CA17140 and to gather from them all suggestions, requirements, hurdles, gaps and needs in the field, and the expected outputs can be summarized as follows: Dissemination of Action activities among the major stakeholders; Dissemination of scientific results to the public entities, to the public domain and to patients' advocates and representatives, and Foundation of a new group of work involving the Action and major stakeholders.
- c. Dissemination planning (publications and outreach activity). The Action Chair, Prof. Sabrina Pricl, informed the MC that general public awareness and public engagement by the Action still required attention and needs to be increased. Then, she recalled that the very popular Science and the Action webinar series was still open and invited all participants to propose their contribution to the Vice-Chair as the event responsible. Next, she also recalled the #MyActionMemories initiative, launched to gather as many #MyCA17140memories as possible in a form of messages directed to the general public. She showed the only 3 messages received from the Action participants, stigmatizing the scarce participation of this little time-and-effort require initiative which has a fundamental impact on the Action visibility and societal payback. The Chair illustrated the Action Newsletters activity she has implemented, with newsletters issues regularly posted on the website at <https://www.nano2clinic.eu/action-newsletters> and made publicly available. She also implemented a new section: CA17140 for our Society on the Action website, with the purpose to make the Action work and activity understandable to the general public. To this goal, the CG members have committed to the task of "translating" the abstracts of our publications listed on our website in a general public-directed language. Aside from the already discussed WG2 books, the Chair informed that, thanks to the Action member Prof. Bruno Sarmiento, Elsevier has accepted to guest a special issue focused on our Action in European Journal of Pharmaceutical Sciences (Q1). All details are available on the Action website at: <https://www.nano2clinic.eu/news/special-issue-european-journal-pharmaceutical-sciences-dedicated-our-action>. The deadline for paper submission was set to the end of action (March 27, 2023). The Chair lamented the fact that all Action members must increase general public awareness and public engagement. To the purpose, she suggested that all Members should engage in the preparation of press releases/videos with



Action results, projects, and interviews to be disseminated to different countries press and media agencies, with focus on major scientific/technological output, events, etc. She strongly required that all MC must contribute to this commitment. To the purpose, the CG will create a dedicated page on the website to host the press releases/videos. These will be in English and distributed to all Action Members for translation into different EU languages and for posting on local press agencies, newspapers, Academic websites, etc. The Chair recalled that the successful involvement of EC citizens will be one of the most added values of the Action.

10. AOB. There was no AOB to be discussed.
11. Location and date of the next meeting. The Action Chair, Prof. Sabrina Prici, recalled that the 6th CA17140 MC meeting will be held online on March 23, from 9:30 to 1:00 pm.
12. Summary of MC decisions. The Action Chair, Prof. Sabrina Prici, briefly summarized all MC decisions taken during the current 5th MC Meeting. The MC decisions taken by e-voting during the time frame between the 5th MC meeting and current MC meeting are summarized in this document's Appendix.
13. The Action Chair, Prof. Sabrina Prici, thanked all participants and declared the MC meeting closed at 1 pm.

Appendix

Summary of the MC decisions taken by e-voting during the time frame between the 4th MC meeting (online,) and current MC meeting

Title	Initiator	Question	StartDate	EndDate	Status	Result
Change in WBP Activities	Sabrina Prici	Do you vote for approving the described proposed changes in the activities for the WBP4?	04/04/2022 17:32	11/04/2022 23:59	closed	approved
5th MC meeting	Sabrina Prici	Do you approve the new dates, location and modality of the 5th MC Meeting?	09/08/2022 11:33	16/08/2022 23:59	closed	approved
Participation of a new Action member	Sabrina Prici	Do you vote for accepting the membership of Fabiana Quaglia as the WG1, 2, 3 and 4 Member of the COST Action CA17140?	05/04/2022 22:28	12/04/2022 23:59	closed	approved
Change of dates for WG4 Meeting in Istanbul	Sabrina Prici	Do you approve the new dates for the WG4 meeting?	09/08/2022 12:34	16/08/2022 23:59	closed	approved
Allocation of LOS from 2 STMS Conference to 5th MC Meeting	Sabrina Prici	Do you approve the shifting of LOS from the 2nd STMS to the 5th MC meeting?	02/09/2022 15:50	09/09/2022 23:59	closed	approved
CG general meeting in Rome	Sabrina Prici	Do you approve the dates and location for the general CG meeting?	09/08/2022 13:04	16/08/2022 23:59	closed	approved
New Dates and Location of the CA17140 Final Meeting	Sabrina Prici	Do you approve the new dates, location and modality of the Final CA17140 Meeting?	11/07/2022 14:49	18/07/2022 23:59	closed	approved
Cancellation of WG4 Meeting and Budget transfer to the CA17140 Final conference	Sabrina Prici	Do you approve cancellation of WG4 meeting for the stated reasons and budget reallocation to the Final CA17140 Conference event?	22/08/2022 18:22	29/08/2022 23:59	closed	approved