Proposal Evaluation Form

EUROPEAN COMMISSION

Horizon Europe Framework Programme (HORIZON)

Evaluation Summary Report - Doctoral Networks

Call: HORIZON-MSCA-2021-DN-01
Type of action: HORIZON-TMA-MSCA-DN
Proposal number: 101072462
Proposal acronym: STRIKE
Duration (months): 48
Proposal title: Comprehensive STRategIes to tacKIE malignant tumors: from nanomedicine and theranostics to precision medicine
Activity: CHE

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	UNIVERSITA DEGLI STUDI DI MESSINA	IT	0	-	259,437.6	12.31%
2	CONSIGLIO NAZIONALE DELLE RICERCHE	IT	0	-	259,437.6	12.31%
3	NATIONAL UNIVERSITY OF IRELAND MAYNOOTH	IE	0	-	286,488	13.60%
4	UNIVERZITA PALACKEHO V OLOMOUCI	CZ	0	-	237,038.4	11.25%
5	UNIVERSITE DE NANTES	FR	0	-	282,693.59	13.42%
6	Nanotech Solutions Sociedad Limitada	ES	0	-	251,971.2	11.96%
7	Cogentech Srl	IT	0	-	259,437.6	12.31%
8	MEDIZINISCHE UNIVERSITAET WIEN	AT	0	-	270,331.2	12.83%
9	WILEY-VCH VERLAG GMBH & CO KGAA	DE	0	-	0	0.00%
10	CYCLOLAB CIKLODEXTRIN KUTATO-FEJLES	HU	0	-	0	0.00%
11	STEM INNOVATION srl	IT	0	-	0	0.00%
12	UNIVERSIDAD AUTONOMA DE MADRID	ES	0	-	0	0.00%
	Total:		0		2,106,835.19	

Abstract:
STRIKE-DN will raise excellence in research and training in nanomedicine/precision medicine creating new generation of entrepreneurial and innovative multidisciplinary ESRs. New experimental aspects on design and synthesis of nanostructured magnetic materials will be applied to the development of innovative magnetic field-responsive nanoterapheutics for osteosarcoma (OS) combinational therapy. Moreover, the peculiar features of STRIKE nanomaterials will be exploited for liquid biopsy using biological samples of BRCA+ breast cancer (BC) patients. The cooperation among outstanding universities, research institutes and industries will provide the ESRs with trans-national exchanges and the most innovative research trainings in novel anticancer therapeutic strategies, including in vivo biological evaluation, imaging in OS and early diagnosis in BC. STRIKE will provide enhanced career perspectives in academic and non-academic sectors for 8 ESRs in highly innovative fields by interdisciplinary mobility among 12 institutes/companies in 8 EU countries. STRIKE aims to: 1) develop 8 highly skilled employable ESRs; 2) enhance interdisciplinary capacity and cooperation within the EU nanomedicine and precision medicine research networks; 3) strengthen EU's competitiveness and growth in nanomedicine and precision medicine through the translation of the consortium research/innovation outputs. The consortium will fulfill its goals through: a) achieving research excellence; b) providing a complete cutting edge research and innovation training program with some of the European top research institutes and industry partners; c) hosting interdisciplinary and commercial workshops, seminars and outreach events; d) maximizing knowledge transfer using Open Science and patents; e) delivering highly trained professionals, whose profiles fit within the requirements of academia, industry and public/private institutions, fostering their employability and promoting the innovation of EU research.

Evaluation Summary Report

Evaluation Result

Total score: 96.80% (Threshold: 70/100.00)

Criterion 1 - Excellence

Score: **5.00** (Threshold: 3/5.00 , Weight: 50.00%)

• Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art).
• Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality and appropriateness of open science practices).
• Quality and credibility of the training programme (including transferable skills, inter/multidisciplinary, inter-sectoral and gender as well as other diversity aspects).
• Quality of the supervision (including mandatory joint supervision for industrial and joint doctorate projects).

Strengths:
- The research topic is relevant and timely, and clearly addresses applied science for improving cancer diagnosis/treatment. The research objectives are very well identified and convincing.
- The state-of-the-art on relevant aspects of the proposal is well addressed and the extent to which the proposal goes beyond the-state-of-the-art is credible.
- The individual research projects are very well integrated into the overall research program.
- The research methodology is clearly described and credible.
- The level of interdisciplinarity of the proposal including aspects of nanotechnology, biomedical engineering, chemistry, physics, oncology,

biology, and health management, is very good.
- The gender dimension, especially relevant for osteosarcoma and breast cancer, is well addressed in the proposal.
- The open science practices are well considered.
- The training programme proposing the development of both scientific and transferable skills is of excellent quality.
- The level of experience on supervision and the qualification of supervisors are excellent and highly convincing. Their expertise is fully in line with the objectives of the individual research projects.
- The responsibilities and the roles of the supervisor and co-supervisors assigned to each candidate are properly demonstrated.

Weaknesses:
No significant weaknesses have been identified.

Criterion 2 - Impact

Score: **4.60** (Threshold: 3/5.00 , Weight: 30.00%)

• Contribution to structuring doctoral training at the European level and to strengthening European innovation capacity, including the potential for:
a) meaningful contribution of the non-academic sector to the doctoral training, as appropriate to the implementation mode and research field
b) developing sustainable elements of doctoral programmes.
• Credibility of the measures to enhance the career perspectives and employability of researchers and contribution to their skills
• Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.development.
• The magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts.

Strengths:
- The contribution of the proposal to strengthening European innovation capacity is credibly demonstrated.
- The role of the non-academic sector in the training, for example in contributing to training courses, providing facilities and human resources in various activities, is well demonstrated and credible.
- It is well demonstrated that the proposal will provide the Doctoral Candidates with important scientific and technical knowledge, for example in the nanotechnology field, together with a range of complementary skills. This will profoundly enhance their career perspectives and employability both in academia and the private sector.
- The dissemination activities to specific target groups are well planned and properly specified.
- The plan for wider dissemination and communication is adequate and covers different types of audiences.
- The magnitude and importance of the project contribution to the scientific, societal and economic impacts is very well addressed and fully credible.

Weaknesses:
- The impact of the proposal on the development of sustainable elements of doctoral programmes is not clearly indicated.
- The measures proposed for the exploitation of the research results, including related IPR aspects, are not presented in sufficient details.

Criterion 3 - implementation

Score: **4.80** (Threshold: 3/5.00 , Weight: 20.00%)

• Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages.
• Quality, capacity and role of each participant, including hosting arrangements and extent to which the consortium as a whole brings together the necessary expertise.

Strengths:
- The work plan is of very good quality and coherent with the project objectives. The work-packages are very well addressed.
- The allocation of the resources to each work-package is fully appropriate.
- The individual research projects are very well aligned with the work-packages.
- The planned secondments are properly defined.
- The deliverables and milestones are sound and effective in project progress monitoring.
- The proposal organization and management structure is clear and effective. Gender and environmental aspects are nicely put in place and fully appropriate for an effective implementation of proposed project.
- The scientific and administrative risks as well as their mitigation plans are clearly articulated, specified in detail and convincing.
- The qualifications of the participants are very high. Their specific roles are very well outlined.
- The infrastructure and facilities offered by participating organizations are well demonstrated and are highly relevant for the implementation of the proposed research and training activities.

Weakness:
- The hosting arrangements, and specifically the integration of the DCs in the teams, are not fully addressed.

Scope of the proposal

Status: **Yes**

Comments (in case the proposal is out of scope)

Not provided

Exceptional funding

A third country participant/international organisation not listed in the General Annex to the Main Work Programme may exceptionally receive funding if their participation is essential for carrying out the project (for instance due to outstanding expertise, access to unique know-how, access to research infrastructure, access to particular geographical environments, possibility to involve key partners in emerging markets, access to data, etc.). (For more information, see the HE programme guide)

Please list the concerned applicants and requested grant amount and explain the reasons why.

Based on the information provided, the following participants should receive exceptional funding:

Not applicable.

Based on the information provided, the following participants should NOT receive exceptional funding:

Not applicable.

Use of human embryonic stem cells (hESC)

Status: **No**

If YES, please state whether the use of hESC is, or is not, in your opinion, necessary to achieve the scientific objectives of the proposal and the reasons why. Alternatively, please state if it cannot be assessed whether the use of hESC is necessary or not because of a lack of information.

Not provided

Use of human embryos

Status: **No**

If YES, please state how the human embryos will be used in the project.

Not provided

Activities excluded from funding

Status: **No**

If YES, please explain.

Not provided

Exclusive focus on civil applications

Status: **Yes**

If NO, please explain.

Not provided

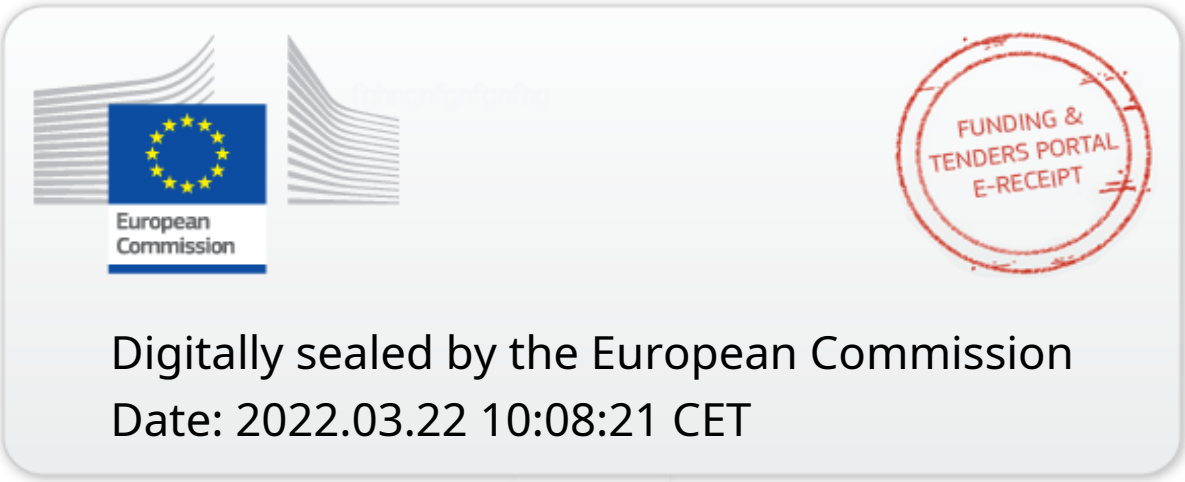
Artificial Intelligence

Status: **No**

If YES, the technical robustness of the proposed system must be evaluated under the appropriate (excellence?) criterion.

Overall comments

Not provided



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