Capacities/Research Potential

FP7-REGPOT-2012-2013-1

Project No. 316254

BASTION

"From Basic to Translational Research in Oncology"

Deliverable D6.8

Mid-term conclusions and recommendations from the IAB

Project start date:	1.09.2012
Project duration:	42 M
Duedate of deliverable:	31.08.2014
Actual submission date:	30.06.2015
Dissemination level:	PUBLIC

Table of content

Attachments:

1. Agenda
2. Participants list

All reports are available on BASTION Webpage: www.bastion.wum.edu.pl

1. INTRODUCTION

The Second International Advisory Board meeting of the BASTION project was held in the Library and Information Centre of the Medical University of Warsaw on May the 22nd, 2014. The following International Advisory Board members participated in the meeting:

Prof. Lars Bullinger, University Hospital of Ulm, Germany,

Prof. William Gallagher, University College of Dublin, Dublin, Ireland,

Prof. Stefano Volinia, Ferrara University, Ferrara, Italy,

Prof. Krzysztof Giannopoulos, Medical University of Lublin, Poland,

Prof. Przemysław Juszczynski, Institute of Hematology, Poland,

Dr. Gaettano Vattemi, University of Verona, Italy,

Dr. Natalia Landazuri, Karolinska Institutet, Stockholm, Sweden,

Ms. Zsofia Bakonyi, Science|Business, Brussels, Belgium

Mr. Konrad Debski, Ministry of Science and Higher Education, Warsaw, Poland

Mr. Marek Orlowski, ORENORE, Warsaw, Poland

Dr. Marcin Szumowski, OncoArendi Therapeutics (OAT),Warsaw, Poland

as well as the Project Coordinator (Prof. Jakub Golab), Project Manager (Iwona Drozdowska-Rusinowicz) and Leaders and/or Vice-leaders of the work-packages:

WP1 – Dr. Tomasz Stoklosa

WP2 – Prof. Zbigniew Gaciong, Prof. Slawomir Majewski

WP3 – Dr Magdalena Winiarska, Dr Radosław Zagozdzon

WP4 – Dr Dominika Nowis

WP5 - Dr Karolina Dzwonek

Before the meeting the following documents were sent to all the International Advisory Board Members :

1. Summary Report on the results achieved within the BASTION project from 1 September 2012 to 28 February 2014,
2. Deliverables for the first reporting period.

International Advisory Board members:

Prof. Lars Bullinger

Prof. William Gallagher

Prof. Stefano Volinia

Prof. Krzysztof Giannopoulos

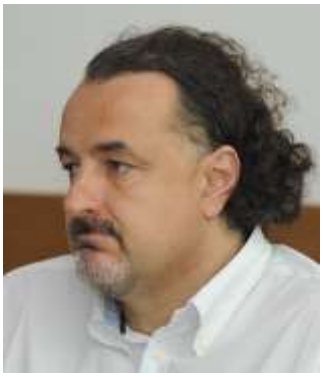
Prof. Przemyslaw Juszczynski

Dr. Gaettano Vattemi

Dr. Natalia Landazuri

Ms. Zsofia Bakonyi

Mr. Konrad Debski



Mr. Marek Orlowski

Dr. Marcin Szumowski

The meeting started with an "Introduction and presentation of the project objectives"

Prof. Jakub Golab (BASTION Project Coordinator) opened the meeting and pointed out that all the activities within the BASTION project were focused on such operational objectives of the project as:
(i) to foster increased scientific dialogue and twinning between MUW and eleven top research centres via secondments of scientific staff (experienced researchers) to transfer knowledge, new research methodologies and techniques, discuss research progress, share experimental data, work on joint research proposals and publications, (ii) to increase knowledge sharing, networking and improve MUW international visibility through organisation of workshops, conferences and dissemination & promotional activities, (iii) to build human potential by recruiting 12 researchers with international experience in basic and clinical oncology, (iv) to build the capacity of MUW's research base in molecular oncology and translational studies by purchasing for state-of-the art equipment items, (v) to facilitate technology transfer and increase the impact of translational studies in oncology.

At the end of his presentation, Prof. Golab concluded that the goals of the project were being satisfactorily pursued, i.e. (i) shortening the way from basic to translational research in oncology, (ii) creating new research opportunities for a new generation of young and experienced scientists, (iii) strengthening the existing partnerships between the University and Scientific Centres of the ERA, (iv) increasing research potential of MUW in the field of experimental oncology, and (v) contributing to the application-oriented research.

This part of the meeting was followed by a reporting seminar involving presentations by the Leaders or Vice-leaders of Work Packages WP1-WP5 on the implementation of the respective parts of the project.

2. BASTION PROJECT REALISATION

2.1. WP1 - Twinning through secondments

Dr. Tomasz Stoklosa– Deputy Leader - presented the results achieved within the WP1

Major aim of Task 1 in Work Package 1 of BASTION project was to foster increased scientific dialogue between Medical University of Warsaw (MUW) and eleven top research centres via secondments of scientific staff (experienced researchers). Such secondments should enable not only transfer of know-how and new methodologies but also were supposed to enable research progress, sharing of experimental data and work on joint research proposals and publications. In the grant proposal 34 outgoing missions to partnering organisation laboratories (53,5 months in total) and 31 incoming missions to MUW from partnering

organisations (24,5 months in total) were planned altogether. Despite several administrative obstacles, 13 outgoing visits (26 months in total) and 3 incoming visits (3 months in total) were accomplished in the first reporting period (18 months). In several of the twinning visits, actual research and training program exceeded initial plans. One of the several examples illustrating this fact is twinning between group of Dr Tomasz Stoklosa from MUW and group of Professor Lars Bullinger from University Hospital of Ulm. Visit of two researchers from MUW in Ulm allowed not only to learn but also to employ ultramodern technology of RNA sequencing on next-generation sequencing (NGS) platform (instead of previously planned classical microarray analysis).
This research was performed in order to discover gene signature and describe genes involved in response to promising novel therapies including tyrosine kinase inhibitors in chronic lymphocytic leukemia (CLL) and to define a group of patients who may benefit from such treatments. Another example of successful twinning was accomplished by a group of Dr Magda Winiarska with Professor Daniel Olive from Universite de la Mediterranee in Marseille. This twinning was also related to studies on hematological malignancies, including CLL, and already resulted in publication of a short report in high-impact Leukemia journal entitled "B-cell receptor pathway inhibitors affect CD20 levels and impair antitumor activity of anti CD20 monoclonal antibodies". Several others successful missions were accomplished, but time limits does not allow to describe all of them, however details are available in the report D1_1. In fact, execution of Work Package 1 during first 18 months of BASTION project provided significant added value by bringing together experts from various disciplines willing to share their expertise and resources. Further continuation of twinning tasks and execution of the full WP1 plan will definitely enable new, joint opportunities in research projects for the scientists from MUW and partnering organizations.

2.2. WP2 - Know-how and experience sharing events

Prof. Zbigniew Gaciong – Leader - presented the results achieved within the WP2

Activities within WP2 have the major goal to increase MUW international visibility through organization of workshops, conferences and promotional activities. Workshop 2 "Cancer genetics for medical community" already took place in June 2013 with more than 100 participants and prominent speakers including prof Albert de la Chapelle and prof Clara Bloomfield (Ohio University). The workshop was organized and chaired by dr Krystian Jazdzewski from BASTION steering committee. Other workshops will be organized according to the schedule, next "Techniques in analysis of cancer vascular biology" will take place on June 6th this year and more than 150 participants has registered till now.
We use different platforms of communication of BASTION activities including direct mailing, advertisements, articles in professional as well as popular journals, local and national radio and television and our own website. BASTION representatives participated in events focused in Innovation (ACES, Fulbright Association, IMI). Our website had 70 articles in the news section and was visited by more than 10 000 people. Cooperation with over 30 journalists (from medical and national media) resulted in over 300 publications about BASTION.

Responsible team is working to find a better way for effective communication both with the scientific community and general public to achieve nationwide interest in BASTION project.

Dr. Tomasz Stoklosa

Prof. Zbigniew Gaciong

2.3. WP3 -Building capacity by attracting and retaining top-level scientists

Dr Magdalena Winiarska – Leader - presented the results achieved within the WP3

BASTION project has fully used its opportunity to recruit nine top-level qualified researchers with high ability to increase research potential in basic and translational oncology at Medical University of Warsaw. The technological expertise and scientific background of all nine recruits fits BASTION effort to strengthen the existing areas of excellence in oncology research. Moreover, each individual brings in know-how and experience in translational oncology work and helps to bridge the gaps and create links among research groups working at MUW. All leaders have succeeded in recruiting extremely diligent and hardworking postdocs showing a great enthusiasm for their work in the field of experimental oncology. Newly employed researchers contribute to the success of BASTION project.

2.4. Establishing a versatile bioinformatics team

Dr. Radoslaw Zagozdzon – Bio-Info Lab Leader – presented the results achieved within Tasks 3.2 and 3.3

In the –omics era in research, it has become a must for the scientific institutions to obtain capabilities of bioinformatics analysis of data. According to this trend, under the BASTION project we have established a versatile bioinformatics team comprised of researchers with a set of complementary experiences. These are: high-throughput data analyst, proteomics & systems biology expert, NGS data analyst, as well as the software and computer system specialist. Also under auspices of BASTION, we have generated a computer cluster in order to support the analyses carried out by the BASTION members and designed for the data storage. Using additional support from National Science Center, we have also established a digital pathology facility. Currently, the group collaborates with several international institutions, including Royal College of Surgeons in Ireland, the MUW's twinning partner

under the BASTION Project. Altogether, the results of the team's work so far are the authorships in seven original publications, one review paper and two book chapters.

Dr. Magdalena Winiarska

Dr. Radoslaw Zagozdzon

2.5. WP4 - Acquisition of modern research equipment

Dr. Dominika Nowis - Deputy Leader - presented the results achieved within the WP4.

All tasks planned within WP4 has been successfully completed in the first 18 months of the duration of the BASTION project. The following instruments have been purchased from the BASTION funds:
`(i) Fluidigm Access Array 2AX + FC1 System; (ii) Beckman Coulter ultracentrifuge Optima L100XPN; (iii) MiltenyiBiotecgentleMACSDissociator; (iv) HielscherUltrasonics UP200ht handheld ultrasonic homogenizer; (v) GE Healthcare preparative chromatography system AKTA avant 25; (vi) Andreas Hettich laboratory centrifuge ROTINA 420R; (vii) Perkin Elmer Janus Integrator automated workstation; (viii) Perkin Elmer Delfiaplatewash; (ix) Perkin Elmer multilabel microplate reader EnVision 2104; (x) Roche MagNA Pure 96 System; (xi) Roche LightCycler 96 System; (xii) Roche LightCycler 480 II System; (xiii) Eppendorf Centrifuge 5430R; (xiv) PALM Laser Microdissector; (xv) Life Technologies Ion Proton System.

Dr. Nowis briefly summarized how the implemented equipment has already been used by the BASTION members in their research work. She pointed on the complementarity of the purchased instruments that allow to carry out a comprehensive pipeline of experiments consisting of purifying and analyzing nucleic acids, followed by the verification of the role of their protein products in vitro. Dr. Nowis also stressed the possibility and importance of sharing these instruments within BASTION groups as well as with the researchers outside BASTION.

The presentation was followed by the brief discussion. Dr. Natalia Landazuri from Karolinska Institutet, Stockholm, Sweden pointed out how important it would be to guarantee the funds for the maintenance of the purchased equipment.

2.6. WP5 - Innovation Capacity Building

Dr. Karolina Dzwonek – Innovation Manager (IM) presented the results achieved within the WP5.

The main goal of that work package is to stimulate the translational process from molecular oncology research to the clinic. IM showed all activities undertaken in order to make researchers aware of intellectual property (IP) issues like seminars and workshops and to identify possibility for IP protection within BASTION research teams. IM summarized BASTION Roundtable organized in June 2013 in the European Parliament, an event on best practices in translational medicine and innovation management, addressed to MUW and KU Leuven researchers. IM reported also initiation of new and reinforce existing relations with the local and regional biomedical and pharmaceutical business. She made an overview about Pharma Day – an event organized within WP5 in April 2014, aiming at facilitation of translational research in academia. At the end IM reported analysis of MUW innovation potential and key steps that should be undertaken at the university to make technology transfer possible.

Dr. Dominika Nowis

Dr. Karolina Dzwonek

3. ACHIEVEMENTS OF RECRUITED EXPERIENCED SCIENTISTS

In the next part of the meeting, researchers recruited within BASTION project presented the summary of the achievements of the teams and described goals to be achieved within the coming months.

Dr. MalgorzataCzystowska-Kuzmicz:„Immunoregulatory role of exosomal arginases in ovarian cancer”

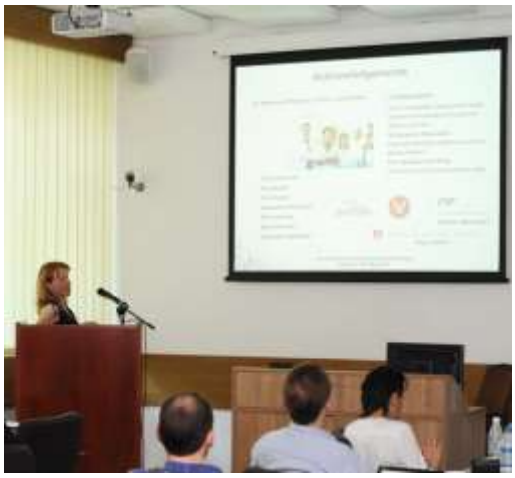
The aim of the research project is to evaluate the role of exosome-associated arginases – enzymes involved in degradation of non-essential amino-acids – at conferring OvCa the ability to escape immune surveillance. Previous studies have convincingly demonstrated that arginase activity is associated with development of chronic inflammation and evasion of anti-tumor immunity in several cancers, but it’s role has not been described in OvCa up to date, especially in association with tumor-derived exosomes. We hypothesize that through the release of arginase-expressing exosomes – nanometer sized membrane vesicles which become systemically distributed through the bloodstream, tumor cells achieve a global L-Arg depletion and hereby a systemic T-cell dysfunction. Our preliminary results strongly indicate that arginase 1 is released in the exosomal fraction from OvCatumor cells and can be found in the sera and ascites of OvCa patients. Moreover, we detected a significantly increased arginase activity in the sera of OvCa patients and a variable arginase-1 expression in primary OvCa lesions. Correlating these results with the clinico-pathologic data and patients’ follow-up will provide assessment of the significance of exosomal arginases as prognostic, and also potentially predictive, biomarkers in OvCa. Our next aim will be to elucidate the effects of exosome-associated arginases on immune cells and their contribution to tumor immune evasion in in vitro and in vivo mouse models. Finally, by using novel arginase inhibitors in in vitro and in vivo studies, we will determine if the inhibition of the enzymatic activity of arginases may be a target for novel anti-cancer strategies. Taken together, our project will delineate a novel mechanism used by human tumors to escape from the host immune system and provide a new potential therapeutic target which may improve treatment regimens and promote better outcomes for OvCa patients.

Dr. Beata Pyrzynska: “Regulation of CD20 expression and its impact on the therapy.”

The monoclonal antibodies against CD20 antigen are able to specifically eliminate B cells and are therefore used in a clinic as a therapeutic strategy in B-cell malignancies. Unfortunately, in some patients the resistance to anti-CD20 therapy develops as a result of reduced level of this antigen on the surface of tumor B-cells. While looking for the molecular mechanisms governing the transcriptional regulation of CD20 expression, we have discovered that both SRC family kinases and downstream AKT kinase are the key regulators. The action of either clinically used SRC inhibitors (such as dasatinib) or AKT inhibitors (such as MK-2206) can therefore result in reduced binding of therapeutic anti-CD20 monoclonal antibodies and increased resistance to such therapy. The aim of this study is to elucidate the molecular mechanism acting downstream of AKT and leading to transcriptional repression of CD20 expression upon treatment with AKT inhibitors and to determine the regulatory region in CD20 promoter that responds to changes in AKT activity. We plan to employ molecular approaches such as DNA pull-down assays, mass spectrometry, methods detecting DNA-protein interaction, like EMSA and ChIP assays. We also plan to extend our study beyond the regulation of CD20 expression and focus on other clinically-targeted surface antigens in B-

cells, such as CD22. We are convinced that our research can provide an important molecular basis for designing improved combination therapies for patients with B-cell tumors.

Dr. Małgorzata Czystowska-Kuzmicz



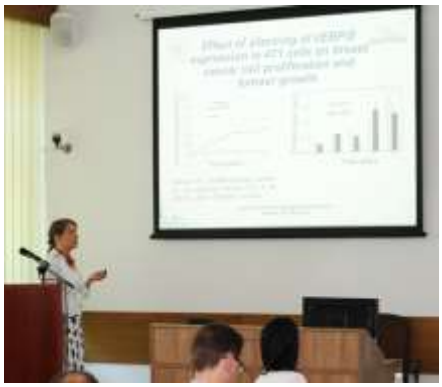
Dr. Beata Pyrzynska

Dr. Marzena Lazarczyk: "Effect of silencing of C/EBPβ expression in 4T1 cells on breast cancer cell proliferation and tumor growth"

C/EBPβ (CCAAT/enhancer-binding protein β) is a transcriptional factor found to be involved in i.e. glioma, lymphoma and breast cancer progression. Experiments conducted on mice injected with murine 4T1 breast cancer cells either with wild type of C/EBPβ or silenced expression of C/EBPβ demonstrated that tumours consisted of C/EBPβ-silenced cells were significantly smaller than tumours with normal expression of the transcriptional factor. Additionally, histochemical analysis revealed that tumours with silenced expression of C/EBPβ were more solid, had more vessels and displayed a lack of large, central necrosis as compared to control tumours. It was also evidenced, that metastasis were absent in brain or liver in both experimental groups but present in abundance in lungs of mice injected with C/EBPβ-silenced tumour cells. The data indicate that loss of C/EBPβ- affects tumor growth and supports metastatic spread of murine 4T1 tumors cells.

Dr. Magdalena Banach-Orlowska: "In search of the pathogenic factors of endometriosis"

Prof. Paweł Wlodarski team focuses on the searching for the pathogenic factors of endometriosis – a gynecological disease manifested by the presence of endometrial tissue outside of the uterus. The origin of ectopic lesions is a fundamental question in endometriosis research. To address this issue we have been investigating the accumulation of somatic mutations in women suffering from endometriosis via whole exome sequencing. We assume that if ectopic endometrium originates from eutopic one the mutation patterns of both tissue types are similar. Moreover, we study the DNA methylation pattern of patients in comparison to healthy women to find differences potentially responsible for disease development.



Dr. Marzena Lazarczyk

Dr. Magdalena Banach-Orlowska

Dr. Anna Wojcicka: "The role of microRNAs in thyroid cancer"

Papillary thyroid carcinoma (PTC) accounts for approximately 85% of all thyroid carcinomas. Unlike many other cancers its incidence is increasing, but the molecular changes underlying thyroid carcinogenesis are not fully understood and recent data show that they involve regulatory genes, such as microRNAs.

MicroRNAs (miRNAs, miRs) are short, non-coding RNAs that regulate the expression of protein-coding genes binding to complementary sequences in the 3'untranslated regions of their transcripts. The sequence that determines binding of a miRNA to its target mRNA comprises nucleotides 2-8 of a miR and is called a seed region. MiRNAs are implicated in the development of several types of human cancers. Their role in carcinogenesis consists mainly in abnormal levels of expression of mature miR transcripts in tumors compared to the corresponding unaffected tissues, resulting in aberrant expression of their target mRNAs. Since a single miRNA can regulate the expression of dozens of genes, abnormal levels of miRNAs lead to deregulation of whole signaling pathways within the tumor cell. MicroRNA expression profiling of human tumors has identified signatures associated with diagnosis, staging, prognosis and response to treatment. It was also shown that both expression and sequence alterations of microRNAs contribute to neoplastic transformation.

However, comprehensive information on the thyroid miRNome is still lacking. In order to determine the complete miRNome of the thyroid gland and papillary thyroid carcinoma (PTC), we performed a next-generation sequencing analysis of 19 PTC specimens (PTC-T), 19 paired, non-cancerous thyroid specimens from PTC patients (PTC-N) and 14 specimens of control thyroid from patients without any malignancy (NN).

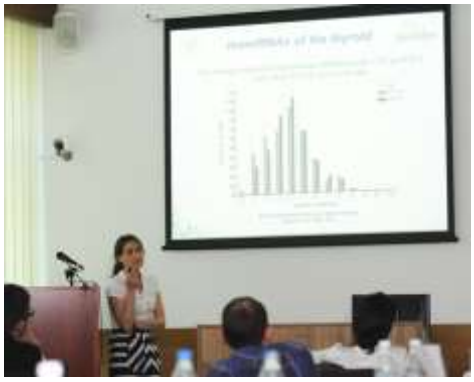
The study showed that from over 1900 known (reference) human miRNAs, only 427 are significantly expressed in the thyroid gland, and 124 of those miRNAs are deregulated in cancer tissue. The analysis was performed using next-generation sequencing what allowed for identification of novel, previously unknown isoforms of known microRNAs. We detected 1749 significantly expressed isomiRs (expression >1% of the total expression of a particular miRNA, in at least 80% of samples within any of the studied groups), including 132, 61, and 56 isoforms specific for PTC-T, PTC-N, and NN, respectively. The average number of isoforms per miRNA is 3.96±1.75, 3.8±1.9, 3.51±2 for PTC-T, PTC-N, and NN, respectively.

The study revealed that the length of numerous isoforms varies at their 5' end, what results in a change of a miRNA seed region, which is responsible for recognition of target mRNA and

for regulation of its expression. In consequence, newly discovered length isoforms constitute alternative microRNAs that target and regulate different genes than their canonical, reference counterparts. The analysis has shown that miRNAs expressed in thyroid tissue can be grouped based on the seed sequence that is shared by a number of isomiRs, often belonging to different miRNA families. As a result, we received a list of 513 seeds that are present in identified isomiRs and can serve as a basis for the genome-wide prediction of genes targeted by the thyroid-expressed miRNAs. Of the identified seeds, 38, 17, and 18 were specific for PTC-T, PTC-N, and NN, respectively. Such specific seeds reside in a group of miRNAs that regulate genes depending specifically on the disease status of the thyroid gland. In case of a miRNA, which is expressed in isoforms exhibiting 4 different seeds, the number of potential target genes is increased 3.2 times compared to a list of genes regulated solely by the canonical form. Over 80% of all target genes were unique for each seed, even if the sequences of isoforms differed by only 1 nucleotide.
In our ongoing studies we identify single nucleotide polymorphisms in microRNA sequences, as well as seek for previously unknown microRNA molecules. This comprehensive approach will result in elucidation of the complete miRNA profiles of the thyroid gland, together with their aberrances in thyroid cancer. This work will significantly contribute to understanding of the mechanisms leading to aberrances in cellular transcriptome and proteome, underlying initiation and progression of papillary thyroid carcinoma.

Dr. Oksana Kovtonyuk: "The role of Cytomegalovirus (CMV) in colon cancer

CMV is a virus which remains latent in the body over a long period of time. Its activation is a causative of many diseases and studies have shown its involvement in various types of cancer. Hence, the role of CMV in tumor progression and metastasis development is currently of major scientific and clinical interest. To evaluate the role of CMV in tumor growth and metastasis of colorectal cancer a combination of different in vivo and in vitro approaches was used in preclinical animal model of cancer combined with CMV infection. Dynamics of tumor growth, number of metastases, circulating tumor cells, markers of Epithelial to Mesenchymal transition as well as migration and invasion ability of carcinoma cancer cells were examined.



Dr. Anna Wojcicka

Dr. Oksana Kovtonyuk

Dr. Pawel Gaj: "Molecular signature of B-cell malignancies"

With the emerge of Next Generation Sequencing the importance of bioinformatic analysis of the medical data has increased. Assembling, aligning and interpreting millions of short reads generated by sequencers require advanced algorithms and specialized data analysis pipelines. Pipelines used at the Medical University of Warsaw are a combination of several most popular pipelines, which allows us to get to get high reliability, good precision and recall. Two case studies have been presented, showing the application of the pipelines to the real samples and obtained results.

Dr. Malgorzata Firczuk: "Overcoming resistance to photodynamic therapy of cancer"

Photodynamic therapy (PDT) is a method of treatment and diagnosis of various disorders including tumor. PDT works in three mechanisms: by inducing direct cytotoxic effect and tumor cell death, destruction of vasculature and induction of antitumor immune response. However, both cytoprotective response, and insufficient immune response lower PDT effectiveness. To improve PDT efficacy, we have undertaken two approaches. Firstly, using selective bacterial cytotoxin we inactivated cytoprotective protein GRP78. Secondly, we are investigating possibilities to improve PDT-induced antitumor immune response.

Dr. Pawel Gaj

Dr. Malgorzata Firczuk

4. CONCLUSIONS& RECOMMENDATIONS

Members of the IAB with the recognition adopted a report on the implementation of the project within 18 months. During the meeting, together with the project team, members of the IAB discussed the problems arising in the course of the project. Some conclusions up to the future realization of the project have been made.

Ad. Twinning threw secondments (WP1):

The major problem is to carry out all the planned missions departure and arrival in the implementation of the twinning exchange between the cooperating research centers. It results from the high mobility of teams in partner institutions, which could not have been forseen when planning the project. Previously, there have also not been taken into account the limitations of scientific work, because of the necessity to conduct classes by experienced researchers, who are employees of Medical University of Warsaw, limiting their trips to the summer holiday months.

Summing up the discussion, the following recommendations has been given:

- Increase the secondments through twinning of younger researchers and newly employed experienced researchers,
- Extend cooperation with other scientific groups from partner institutions,
- Adjust the length of exchanges to the current needs of research teams.

Ad. Know-how and experience sharing (WP2)

- Develop additional practical part of next planned workshops,
- Determine the date of the conference on May 2015,

- Precede the preparation of the "policy paper" by medical market research in the field of translational oncology.

Ad. Capacity building (WP3)

- Apply for permission to extend the employment of members of the group Bioinfo employed for a shorter period of time than other employees. Their work involves the creation of a laboratory, for which the specialised IT equipment was purchased. Longer period is needed to fully exploit the opportunities of bioinformatics cluster and develop research based on its capabilities.

Ad. Acquisition of modern research equipment (WP4)

- Intensified use of purchased equipment by other research teams of Medical University of Warsaw that deal with the similar topics,
- Reflection on finding livelihoods of test equipment, after the accomplishment of the project.

Ad. Innovation capacities building (WP5)

- Preparation of bilingual materials for intellectual property management and technology transfer aimed at students and researchers of the Medical University of Warsaw, as well as MUW's administration.-

Despite the obstacles mentioned above, the team leaders emphasized the high involvement of the team members, including employed postdocs - experienced researchers as well as IT specialists, in the research carried out within BASTION project and their motivation and diligence to overcome the difficulties.

The discussion in the University took about two hours. Next, the meeting participants moved to a restaurant for a dinner. The discussion, however, was still vivid and finished after the next four hours.

5. CORRESPONDING BUDGET

PERSONNEL, TRAVEL AND OTHER MAJOR DIRECT COST ITEMS			
	Item description	Amount [EUR]	Explanations
Work Package WP6 Task T6.1	Personnel costs	app./* 3,800.00	Fee of the WP6 Leader (app.0,33 PM) and salary for Project Manager (app 0,75 PM)
	Travel	3,604.16	Travel & accommodation within IInd IAB Meeting
	Subcontracting	509.75	IInd IAB Meeting; catering
	Remaining direct costs	842.17	IInd IAB Meeting; dinner 22.05.2014& others costs
TOTAL DIRECT COST		**8,756.08**	

/* - *exact costs will be presented in the IInd Period Report and Form C (October 2015)*

Prof. Jakub Golab

BASTION Project Coordinator

Iwona Drozdowska-Rusinowicz

BASTION Project Manager

Warsaw, June 2015

Attachment 1/1

From Basic to Translational Research in Oncology

II[nd] International Advisory Board Meeting

Medical University of Warsaw, Zwirki & Wigury 63 Str.
Library and Information Centre, Hall no 128, I[st] floor

22[nd] May, 2014

10.30 - 11.00	**Welcome Coffee - Registration**	
Time	**Topic**	**Speaker**
11.00 – 11.15	Welcome - Presentation of the project	Prof. Jakub Golab – Project Coordinator
BASTION Project - Work Packages Progress		
11.15 – 11.30	Twinning through secondments -WP1	Dr. Tomasz Stokłosa
11.30 – 11.45	Know-how and experience sharing - WP2	Prof. Zbigniew Gaciong
11.45 – 12.00	Building capacity by attracting top-level scientists WP3	Dr. Magdalena Winiarska
12.00 – 12.15	Acquisition of research equipment - WP4	Dr. Dominika Nowis
12.15 – 12.45	**Coffee break**	
12.45 – 13.00	Innovation capacities building - WP5	Dr. Karolina Dzwonek
13.00 – 13.15	New Bioinformatics Group	Dr. Radoslaw Zagozdzon
13.15 – 13.30	Discussion, Q&A	
13.30 –14.30	**Lunch**	
BASTION Project - Research Progress		
Presentations of the research groups activities by the newly hired experienced researchers – PART I /*		
14.30 – 15.30	*Immunoregulatory role of exosomal arginases in ovarian cancer*	Dr. Malgorzata Czystowska-Kuzmicz
	Regulation of CD20 expression and its impact on the therapy	Dr. Beata Pyrzynska
	Overcoming resistance to photodynamic therapy of cancer	Dr. Malgorzata Firczuk
	C/EBPbeta in progression of breast cancer	Dr. Marzena Lazarczyk
	In search of the pathogenic factors of endometriosis	Dr. Magdalena Banach-Orlowska

Attachment 1/2

BASTION *From Basic to Translational Research in Oncology*

II[nd] International Advisory Board Meeting

Time	Topic	Speaker
15.30 – 16.00	Coffee break	
Presentations of the research groups activities by the newly hired experienced researchers – PART II /*		
16.00 – 17.00	*The role of microRNAs in thyroid cancer*	Dr. Anna Wojcicka
	Role of CMV in colon cancer	Dr. Oksana Kovtonyuk
	Whole Exome Sequencing to Identify Somatic Variants in Cancer	M.Sc. Piotr Stawinski
	Molecular signature of B-cell malignancies	Dr. Pawel Gaj
17:00	Closing remarks	

/*presentation time is up to 7 min., after the end of each presentation 3 minutes discussion is provide

Please, visit BASTION Web page http://bastion.wum.edu.pl/raporty/ where you can find all about our activities during the I[st] Period of the Project.

This project is funded by the European Commission within the Seventh Framework Programme, Grant Agreement no 316254 and is co-founded by the Polish Ministry of Science and Higher Education

Attachment 2

List of Participants

BASTION Project - II[nd] International Advisory Board Meeting
22[nd] May, 2014 - Medical University of Warsaw

LIST of PARTICIPANTS

Lp.	Imię / Name	Nazwisko/ Surname	International Advisory Board IAB	BASTION Team	WUM Authorities	WUM Support Group	Podpis/ Signature
1	Dr. Małgorzata	Bajor		X			
2	Ms Zsofia	Bakonyi	X				
3	Dr. Magdalena	Banach-Orłowska		X			
4	Prof. Lars	Bullinger	X	X			
5	Dr. Małgorzata	Czystowska-Kuźmicz		X			
6	Mr. Konrad	Dębski	X				
7	M.Sc. Iwona	Drozdowska-Rusinowicz		X			
8	Dr. Karolina	Dzwonek		X			
9	Dr. Małgorzata	Firczuk		X			
10	Prof. Zbigniew	Gaciong		X			
11	Dr. Paweł	Gaj		X			
12	Prof. William	Gallagher	X				

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LIST of PARTICIPANTS

Lp.	Imię / Name	Nazwisko/ Surname	International Advisory Board IAB	BASTION Team	WUM Authorities	WUM Support Group	Podpis/ Signature
13	M.Sc. Dorota	Gawrońska-Wojcik			X		
14	Prof. Krzysztof	Giannopoulos	X				
15	M.Sc. Michał	Gierałtowski		X			
16	M.Sc. Sławomir	Gruca		X			
17	M.Sc. Jolanta	Ilków			X		
18	Prof. Marek	Jakóbisiak			X		
19	Prof. Jakub	Gołąb		X			
20	Dr. Krystian	Jażdżewski		X			
21	Prof.Przemysław	Juszczyński	X				
22	Dr. Oksana	Kovtonyuk		X			
23	Prof. Marek	Krawczyk			X		
24	Dr. Natalia	Landázuri Sáenz	X				

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25	Dr Marzena	Łazarczyk		X			
26	Prof. Sławomir	Majewski		X			
27	M.Sc. Paweł	Nowicki	X				
28	Dr. Dominika	Nowis		X			
29	Dr. Marek	Orłowski	X				
30	Dr. Beata	Pyrzyńska		X			
31	M.Sc. Małgorzata	Rejnik			X		
32	Dr. Piotr	Religa		X			
33	M.Sc. Joanna	Sobczak				X	
34	M.Sc. Piotr	Stawiński					
35	Dr. Tomasz	Stokłosa		X			
36	Dr. Marcin	Szumowski	X				

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37	Dr. Gaettano	Vattemi	X				
38	Prof. Stefano	Volinia	X				
39	Prof. Mirosław	Wielgoś			X		
40	Dr. Magdalena	Winiarska		X			
41	Dr. Paweł	Włodarski		X			
42	Dr. Anna	Wójcicka		X			
43	Dr. Radosław	Zagożdżon		X			
44	M.Sc. Anna	Zdobych				X	
45							
46							
47							
48							