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## Leitfaden für die Antragstellung im Rahmen der Förderinitiative: Molekulare Bildgebung in der Medizin - MoBiMed

Im Rahmen der Fördermaßnahme 'Molekulare Bildgebung in der Medizin' stellt das BMBF Fördermittel zur Verfügung, mit denen die anwendungsorientierte Forschung im Bereich der Molekularen Bildgebung gestärkt und bereits vorhandene Ansätze im Hinblick auf Erfolg versprechende klinische Anwendungen weiter entwickelt werden sollen. In Abhängigkeit vom jeweiligen Kenntnisstand kann zur klinischen Validierung einer konkreten Anwendung auch die Förderung von klinischen Studien der Phase I oder II beantragt werden.

Der nachfolgende Leitfaden dient als Leitlinie zur Antragstellung. Die Randbedingungen der Förderung sind in der Förderrichtlinie des BMBF (<http://www.gesundheitsforschung-bmbf.de/de/1499.php>) dargestellt. Die Kenntnis der Förderrichtlinien wird vorausgesetzt.

Spätestens bis zum **28.6.2007** (Eingangsdatum) können Vorhabenbeschreibungen im Umfang von max. 10 Seiten für das übergeordnete Konzept und max. 5 Seiten pro Teilprojekt (Format: DIN A4, 11 Punkt Arial, 1,5-zeilig, doppelseitig bedruckt) beim Projektträger im DLR für das BMBF, Gesundheitsforschung, Heinrich-Konen-Str. 1, 53227 Bonn, (<http://www.pt-dlr.de/>) eingereicht werden. Im Hinblick auf das internationale Begutachtungsverfahren wird die Einreichung der Vorhabenbeschreibungen in englischer Sprache empfohlen. Als Hilfestellung für die Antragstellung ist die folgende Gliederung bereits in englisch formuliert.

Vorhabenbeschreibungen sind entsprechend den Vorgaben dieses Leitfadens zu gliedern und dem Projektträger in **20-facher Ausfertigung plus einer ungebundenen Kopiervorlage sowie auf CD-ROM im PDF Format (max. 10 MB)** vorzulegen.

Gleichzeitig mit der **formlosen Vorhabenbeschreibung** ist ein **elektronisches Datenblatt** (Electronic Data Sheet) auszufüllen. Das Datenblatt dient der Erfassung aller eingegangenen Anträge und der Zuordnung zu den Anwendungsfeldern.

**Anträge, die den Vorgaben dieses Leitfadens nicht entsprechen (z.B. bei denen keine elektronischen Daten (Electronic Data Sheets) vorliegen), können nicht berücksichtigt werden.**

Neben diesem Leitfaden gelten weiterhin die entsprechenden Merkblätter und Richtlinien des BMBF, soweit in diesem Leitfaden nicht ausdrücklich andere Regelungen getroffen sind.

Weiterführende Links für die Antragstellung finden Sie auf den Internetseiten des BMBF<sup>1</sup>. Die dort veröffentlichten Anforderungen/Informationen werden regelmäßig aktualisiert. Eine Durchsicht vor dem Einreichen eines förmlichen Antrages (zweite Verfahrensstufe) wird dringend empfohlen.

### Allgemeine Hinweise

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<sup>1</sup> <http://www.foerderportal.bund.de/>

- **Anforderungen an einen FuE-Verbund**

- Multidisziplinarität

Um das Themenfeld der molekularen Bildgebung erfolgreich bearbeiten zu können, ist die Kooperation und Kommunikation einer ganzen Reihe von Fachdisziplinen wie Physik, Ingenieurwissenschaften, Informatik, Chemie, Pharmazie, Biologie und Medizin eine grundlegende Voraussetzung. Speziell für den Transfer der Ergebnisse in den Markt ist die Einbindung von Unternehmen, für den Transfer in die Krankenversorgung die Einbindung der Kliniken notwendig. In einem FuE-Verbund sollen sich klinische, experimentelle und Technologie entwickelnde Arbeitsgruppen zusammenschließen. Sämtliche für die behandelte Fragestellung relevanten Disziplinen müssen einbezogen sein.

- (Über)Regionalität und Repräsentativität

Es soll ein regionaler bzw. überregionaler Ansatz vorgelegt werden, der alle wesentlichen Akteure einbezieht. Die beteiligten Partner müssen Schlüsselstellungen in der Forschung und der medizinischen Versorgung einnehmen, ihre medizinischen, wissenschaftlichen und integrativen Vorleistungen müssen in Qualität und Umfang überzeugen. Bereits aufgebaute Strukturen, z.B. Sonderforschungsbereiche der DFG usw. mit einschlägiger Thematik, sollen nach Möglichkeit integriert werden. Das Vorhandensein bzw. die Verfügbarkeit der erforderlichen apparativen Ausstattung wird in der Regel vorausgesetzt.

- Klinische Relevanz

Die medizinische Fragestellung muss für das Versorgungssystem relevant sein: das entsprechende Krankheitsgebiet muss durch eine hohe Mortalität oder Morbidität gekennzeichnet sein, sich in besonderer Weise als Modellfall für andere Krankheitsbereiche eignen und/oder einen erheblichen Kostenfaktor im Gesundheitssystem darstellen.

- **Bonität:**

Unternehmen der gewerblichen Wirtschaft können nur dann gefördert werden, wenn die Bonität des Unternehmens für die beantragte Laufzeit der Fördermaßnahme gesichert ist. Der Förderer behält sich daher vor, geeignete Unterlagen (z.B. testierte Jahresabschlüsse, Lageberichte, Betriebswirtschaftliche Auswertung) in der zweiten Verfahrenstufe bei Vorlage des förmlichen Förderantrages anzufordern, durch die nachzuweisen ist, dass die in den Vorhaben aufgeführten Ressourcen der Antragsteller für die gesamte Laufzeit der Förderung aufgebracht werden können.

- **Förderquoten:**

Die nachfolgend angegebenen Förderquoten sollen zur grundsätzlichen Orientierung dienen. Die endgültigen Förderquoten werden aber erst aufgrund der Prüfung des Einzelfalls festgelegt.

- **Universitäre und außeruniversitäre Forschungseinrichtungen** können i.d.R.
  - bei präklinischen Forschungsarbeiten bis zu 100% ihrer projektbezogenen Ausgaben beantragen.
- **Unternehmen der gewerblichen Wirtschaft** können i.d.R.
  - bei präklinischen Forschungsarbeiten bis zu 50% ihrer projektbezogenen Kosten,
  - bei klinischen Studien der Phase I bis zu 50% ihrer projektbezogenen Kosten,
  - bei klinischen Studien der Phase II bis zu 25% ihrer projektbezogenen Kosten beantragen.
  - Die verbleibenden Kosten für die klinische Studie trägt der Konsortialpartner, der überwiegend die Ergebnisse wirtschaftlich verwerten wird.
  - Bei KMU<sup>2</sup> und Unternehmen aus den neuen Bundesländern (NBL, mit Ausnahme der Arbeitsmarktregion Berlin), kann über die oben genannten Förderquoten hinaus noch eine Erhöhung der Förderquote um 10% (jeweils für jede erfüllte Rahmenbedingung) gewährt werden.
- **Klinische Studien:**
  - Falls eine klinische Studie beantragt wird, sind neben der formlosen Beschreibung des Konsortiums (siehe Punkt 1 - Description of Consortium) die Synopse des Studienprotokolls im Umfang von 7 Seiten nach den Vorgaben dieses Leitfadens sowie **ein** Exemplar des vollständigen Studienprotokolls einzureichen (siehe Punkt 3.). Synopsen von Studienprotokollen, die den Vorgaben dieses Leitfadens nicht entsprechen, können nicht berücksichtigt werden. **Insbesondere führen fehlende Unterschriften zu einem Ausschluss aus dem weiteren Antragsverfahren.**
  - Im Falle einer positiven Begutachtung muss dem Förderer vor Beginn der Patientenrekrutierung das uneingeschränkt positive Ethikvotum (für die vorliegende Version des Studienprotokolls), eine Bestätigung über die erfolgte Registrierung in einem öffentlich zugänglichem Register (wie z.B. [clinicaltrials.gov](http://clinicaltrials.gov) oder [controlled-trials.com/](http://controlled-trials.com/)) sowie die Sponsorenerklärung zur Verpflichtung auf die Leitlinien zur guten klinischen Praxis vorgelegt werden.

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<sup>2</sup>Kleine und mittlere Unternehmen im Sinne der Definition der Europäischen Kommission ([http://ec.europa.eu/enterprise/enterprise\\_policy/sme\\_definition/index\\_de.htm](http://ec.europa.eu/enterprise/enterprise_policy/sme_definition/index_de.htm)). Das bedeutet, dass die Unternehmen weniger als 250 Beschäftigte, einen Jahresumsatz von höchstens 50 Mio. EUR oder eine Jahresbilanzsumme von höchstens 43 Mio. EUR haben und nicht zu 25% oder mehr des Kapitals oder der Stimmanteile im Besitz von Unternehmen sind, welche die KMU-Kriterien nicht erfüllen.

# 1. Description of Consortium

## 1.1 GENERAL INFORMATION ON THE CONSORTIUM

The description of the consortium (No. 1.1. - 1.3.) should not exceed **10 pages**.

### 1.1.1 Title of the consortium

The title of the consortium (max. 140 characters) should be as precise as possible. In case of funding, this title will be quoted in the annual reports of the funding organisation. Acronym is optional.

### 1.1.2 Coordinator of the consortium

Name, address, telephone, fax, e-mail.

### 1.1.3 Scheduled duration

Please indicate the time period for which funding is requested (up to 3 years), and the date when funding should begin.

### 1.1.4 Project summary of consortium

Please give a summary of the main goals of the project (max. 1200 characters). The project summary serves two main purposes:

- i) It will inform the multidisciplinary review committee of the principal aims of the project.
- ii) If your project is funded the summary will be published on the internet through an electronic information system. (It should therefore be concise as well as comprehensible to a lay public). Please avoid abbreviations.

## 1.2 OBJECTIVES, INNOVATION AND RELEVANCE

### 1.2.1 The medical problem

What is the diagnostic / medical problem? What is the medical need to be addressed? (e.g. burden of disease, prevalence, incidence, reasons for the project)

### 1.2.2 Objectives / Research goal

Description of the current state of the art and planned research goals of the consortium. Which results are expected? How was the evidence assessed? (e.g. recent research, pilot studies, review of publications, ongoing related studies) Which were the major findings?

### 1.2.3 Novel aspect and future impact

What is the novel aspect of the proposed imaging method? Specify the impact and consequences of the results on clinical practice (e.g. prevention, diagnosis, therapy) or understanding of the addressed disease.

### 1.2.4 Strategies for the dissemination of results

What will be your strategies for the dissemination of results? Indicate how the expected results of the project will be used; discuss dissemination of results, especially beyond regular journal publication, describe intended measures.

### 1.2.5 Strategies for commercial exploitation

Comment on the perspectives of commercial exploitation of the results (size and value of potential markets, intellectual property rights). Which strategies does the industrial partner intend to employ for exploitation? Detail potential economic impact.

## 1.3. DESCRIPTION OF THE CONSORTIUM ORGANIZATION

### 1.3.1 Summary of consortium structure

#### Example:

Subproject No.	Partner	Title of Subproject	Function in the consortium	Contribution
1	University of...	Preclinical evaluation of molecular imaging of breast cancer	Coordination	Monitoring, evaluation and processing of results
2	Dept. of Radiopharmaceutical Chemistry	Development of a smart sensor probe for detection of Cathepsin positive micrometastases	Preclinical partner	Design of a new probe
3	xyz GmbH	New software tool for co-registration, quantitation and processing of multimodal data	Technological partner	Optimization of hard- and software tools

### 1.3.2 Cooperation

Which structure is available, respectively will be implemented for an efficient cooperation within the consortium? How will the consortium be managed? What are the contributions of the individual partners? Enterprises need to list major subcontractors within their subproject.

### 1.3.3 Access to existing infrastructure and previous achievements

Describe whether access to existing infrastructure and previous achievements relevant for the application is available within the consortium or in other cooperative institutions, e.g. imaging facilities, novel biomarkers, GMP producing facility, data processing tools, animal models, patient cohorts. Please characterize available infrastructure.

### 1.3.4 Multidisciplinarity and Added value

Comment on the synergistic effects of interaction within the consortium also with respect to different disciplines involved and planned or possible networking with other already existing research networks in the field.

### 1.3.5 Work packages/ timeframe/ milestones

In which time-frame will major work-packages be achieved; what milestones are planned?

### 1.3.6 Summary of financial plan for all subprojects

**Example:**

Subproject No.	Partner	Total costs of project	Applied BMBF Funds	Co-financed by industry or other sources
1	University of...	400.000 €	400.000 €	0
2	Dept. of Radiopharmaceutical Chemistry	300.000 €	300.000 €	0
3	xyz GmbH	500.000 €	250.000 €	250.000 €

## 2. Description of Individual Subprojects

### 2.1 PRECLINICAL RESEARCH PROJECT

The following outline is relevant for *preclinical research projects* only. In case you want to apply for funding of a *clinical study*, please proceed to outline 3.

The description of each preclinical research project should not exceed **5 pages**.

#### 2.1.1 Title of the subproject

The title of the subproject (max. 140 characters) should be precise. In case of funding this title will be quoted in the annual reports of the funding organisation.

#### 2.1.2 Principal investigator of the subproject

Name, address, telephone, fax, e-mail.

#### 2.1.3 Scientific discipline and previous work

Please name your discipline and your special field of work. Please give proof of qualifications for the project applied for with respect to

- main focus of relevant previous work
- description of major relevant findings (e.g. proof of concept)
- most important relevant publications of the past 3 years
- relevant patents over the last 5 years
- if applicable, quality and scope of already existing networking in molecular imaging research

#### 2.1.4 Scheduled duration

Please quote

- the time period for which funding is requested (max. 3 years).
- the date when funding should begin.

### **2.1.5 Summary**

Please give a summary of the main goals of the subproject (max. 1200 characters). The summary serves two main purposes:

- It will inform the multidisciplinary review committee of the principal aims of the subproject.
- If your subproject is funded the summary will be published on the internet through an electronic information system. (It should therefore be concise as well as comprehensible to a lay public). Please avoid abbreviations.

## **2.2. INNOVATION AND RELEVANCE OF THE SUBPROJECT**

### **2.2.1 Objectives / Research Goal**

What is the objective? What is the aim of the study? What results are expected?

### **2.2.2 Novel aspect and future impact**

Briefly describe the state of the art and how the proposed subproject extends beyond it. What is the relevance of the subproject in the context of the consortium? Specify the impact of the results on clinical practice, understanding of the disease or disease intervention.

### **2.2.3 Methods**

Please describe briefly the methods you intend to apply.

### **2.2.4 Working packages/timeframe/milestones**

Please describe the work-packages, the milestones you plan to achieve and the time-frame which is necessary.

### **2.2.5 Compliance with GLP and MPG**

If an approval of a novel probe or contrast agent is intended, please indicate how the preclinical research will be conducted in compliance with the requirements of GLP (good laboratory practice) standards. In case of development of a novel method or technique classified as a medical device (nach Medizinproduktegesetz –MPG), please provide a detailed risk assessment.

### **2.2.6 Financial Plan**

Please structure the financial plan by completing the table “financial plan for subproject No... “ as outlined on the next page (2.3). Please specify number and qualification of the requested personnel with respect to the working packages described in 2.2.4 and detail consumables, equipment and commissions.

### **2.2.7 Co-financing**

Please indicate any co-financing by industry or other sources.

### **2.2.8 Other funding**

In case you have already submitted parts of the same request to other institutions or the BMBF, please mention this here. Indicate other sources which will provide funds, free services or consumables.

If this is not the case please declare:

"A request for funding this project has not been submitted to any other addressee. In case I submit such a request I will inform the Federal Ministry of Education and Research immediately.

**2.2.9 Plan for exploitation of the results derived from the subproject**

Please indicate how the expected results will be used. Describe the proposed arrangements for disseminating the results of the research to potential users. Detail economic, scientific and /or technological chances of success as well as scientific and economic connectivity.

## 2.3. FINANCIAL PLAN FOR SUBPROJECT NO. ...

Type of expenditure	1 <sup>st</sup> year (months)	2 <sup>nd</sup> year (months)	3 <sup>rd</sup> year (months)	1 <sup>st</sup> year (EUR)	2 <sup>nd</sup> year (EUR)	3 <sup>rd</sup> year (EUR)	Total of BMBF funds applied (EUR)	Co-financed by industry or others (EUR)
<b>PERSONNEL</b>								
Scientist*	6	12	12	22.698	45.398	45.398	113.494	0
Graduate student*	12	12	12	22.698	22.698	22.698	68.094	0
Technician*		12	12		33.564	33.564	67.128	0
Engineer*	12	12		39.336	39.336		78.672	0
Others*								
<b>CONSUMABLES</b> (to specify)	---	---	---					
<b>EQUIPMENT</b> (to specify)	---	---	---					
<b>COMMISSIONS/ F&amp;E subcontractors</b> (to specify)	---	---	---					
<b>TRAVEL</b>	---	---	---					
<b>OTHER (to specify)</b>	---	---	---					
<b>TOTAL of BMBF funds applied</b>								
<b>TOTAL of co-financed by other sources</b>								

\* Please use global employment rates of the BMBF for calculating the salaries

(Insert lines according to space required)

## 3. Description of Clinical Study

### 3.1 STUDY SYNOPSIS

The following outline is only relevant for subprojects with focus on *clinical studies*. Originally designed for applications on controlled clinical trials only those headings which are relevant for the design of the planned clinical study have to be filled in.

The description of the clinical research project (study synopsis as required by the respective registration authority) **should not exceed 7 pages max.** (DIN A4, at least 10 point Arial, single space). Make an entry under every heading/subheading.

Note that in addition to the study synopsis **one** complete study protocol has to be submitted.

**Signatures of principal/coordinating investigator and responsible biostatistician are mandatory, as well as of collaborators who contribute substantially, e.g. as investigator of a substudy.** It is acceptable to submit separate signature pages of collaborators.

#### 3.1.1 STUDY SUMMARY

<b>APPLICANT / COORDINATING INVESTIGATOR</b>	Name, address, telephone, fax, e-mail <i>In case of multiple applicants the principal investigator / coordinating investigator<sup>3</sup> of the study who will assume responsibility for conducting the clinical study, should be listed first.</i>
<b>TITLE OF STUDY</b>	<i>The title of the study (not exceeding 140 characters) should be as precise as possible. In case of funding this title shall be quoted in the annual reports of the funding organisations. Acronym is optional.</i>
<b>CONDITION/TOPIC</b>	<i>The medical condition being studied (e.g. Parkinson, depression, asthma)</i>
<b>OBJECTIVE(S)</b>	<i>Which principal research questions are to be addressed? Specify clearly the primary hypotheses of the study that determine sample size calculation (not exceeding 140 characters).</i>
<b>INTERVENTION(S)</b>	<i>Description of the experimental and the control treatments or interventions as well as dose and mode of application. For diagnostic tests or procedures the experimental test and the gold-standard or reference procedure should be described.</i>  <u>Experimental intervention:</u>  <u>Control intervention / Reference therapy if applicable:</u>  <u>Duration of intervention per patient/subject:</u>  <u>Accompanying measures: (e.g pharmacokinetic analyses, biomarkers):</u>
<b>KEY INCLUSION AND EXCLUSION CRITERIA</b>	<u>Key inclusion criteria:</u>  <u>Key exclusion criteria:</u>  <u>Special Populations (elderly, children, gender, impaired organ function):</u>
<b>OUTCOME(S)</b>	<u>Primary endpoint(s) (e.g. for dose-finding in Phase I, e.g. for assessment of activity in Phase II)</u>

<sup>3</sup> "Investigator" as defined in the harmonised "Guideline for Good Clinical Practice" of the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH GCP) (<http://www.emea.eu.int>). This definition should be used accordingly for non-drug studies / studies: (1.34 Investigator) "A person responsible for the conduct of a clinical study at a study site. If a study is conducted by a team of individuals at a study site, the investigator is the responsible leader of the team and may be called the principal investigator." (1.19 Coordinating investigator) "An investigator assigned the responsibility for the coordination of investigators at different centres participating in a multicenter study."

	<u>Key secondary endpoint(s):</u> <u>Assessment of safety:</u>
<b>DURATION OF TREATMENT AND FOLLOW-UP</b>	<u>Duration of treatment per patient:</u> <u>Follow-up per patient:</u>
<b>STUDY DESIGN</b>	<i>Study type (e.g. single agent or combination, parallel group, cross-over)</i> <i>Type of controls e.g.(active / placebo)</i> <i>Measures taken against bias e.g. randomized / non-randomized, type of masking (single, double, observer blind),</i>
<b>STATISTICAL ANALYSIS</b>	<u>Efficacy:</u> <u>Description of the primary efficacy analysis and population:</u> <u>Safety:</u> <u>Secondary endpoints:</u>
<b>SAMPLE SIZE</b>	<u>To be assessed for eligibility (n = ...)</u> <u>To be allocated to study (n = ...)</u> <u>To be analysed (n = ...) (reasons for and handling of drop outs)</u>
<b>STUDY DURATION</b>	<u>First patient / subject in / last patient / subject out:</u> <u>Duration of the entire study:</u>
<b>PARTICIPATING CENTERS</b>	<i>How many centres will be involved?</i>

## 3.2. THE MEDICAL PROBLEM

Which medical problem is to be addressed? What is the novel aspect of the proposed study? Which principal research questions are to be addressed? Bring them into order indicating major and minor motivations/starting hypotheses of the investigation planned.

### 3.2.1 Evidence

Set your study into perspective. Which studies have been conducted either by you or by others? What is the relevance of their results and what are the key differences compared with your study? Give references to any relevant systematic review(s) and/or (own) pilot studies, feasibility studies, relevant previous/ongoing studies, case reports/ series. If you believe that no relevant previous studies have been done, give details of your search strategy for existing information. This should both detail the background of the starting hypotheses and the feasibility of the study.

### 3.2.2. The need for a Clinical study

What impact will the results have on clinical practice or understanding of the proposed intervention or underlying disease? Discuss possible a positive as well as negative study outcome. What is the risk of inconclusive results?

## 3.3 JUSTIFICATION OF DESIGN ASPECTS

### 3.3.1 Control(s) / comparator(s)

Justify the choice of control(s)/comparison(s) or justify the conduct of a single agent study.

Are placebo controls acceptable/feasible? Which previous studies established efficacy and safety of the chosen control regimen?

**3.3.2 Inclusion/exclusion criteria**

Justify the population to be studied, include reflections on generalizability and representativeness.

**3.3.3 Outcome measures**

Justify the endpoints chosen. Are there other studies that have utilized this endpoint? Are there any guidelines proposing this endpoint/these endpoints? Discuss the clinical relevance of the outcome measures for the target population. Have the measures been validated? If you have chosen surrogate endpoints (e.g. biomarkers) justify. How accurate can the outcome be measured in relation to clinical practice (e.g. when patient's visits are restricted to a periodical or irregular schedule, interval censored data).

**3.3.4 Methods against bias**

Is randomisation feasible? Which prognostic factors need to be regarded in the randomisation scheme and the analysis? What are the proposed practical arrangements for allocating participants to study groups? Can/should the study population be subdivided into strata?

Is blinding possible? If blinding is not possible please explain why and give details of alternative methods to avoid biased assessment of results (e.g. blinded assessment of outcome).

**3.3.5 Proposed sample size / power calculations**

What is the proposed sample size and what is the justification for the assumptions underlying the sample size determinations (statistical hypotheses, statistical error probabilities and power calculations). If the sample size is not based on statistical hypotheses justify why another approach has been chosen and why that enables to answer the medical question of the study. In particular, in Phase I studies: describe the dose escalation scheme and the stopping rule, and in Phase II studies, distinguish between single stage and two/multistage designs, give the samples sizes at each stage and the stopping rules. In comparative studies, include a comprehensible, checkable description of the power calculations and sample sizes detailing the outcome measures on which these have been based for both control and experimental groups. Justify the size of difference that the study is powered to detect, or in case of a non-inferiority or equivalence study, the size of difference that the study is powered to exclude. It is important that the sample size calculations take into account anticipated rates of non-compliance and losses to follow up. Give event rates, means and medians of quantitative outcomes, etc., as appropriate.

**3.3.6 Feasibility of recruitment**

What is the evidence that the intended recruitment rate is achievable (e.g. pilot study)? Describe from what data you assessed the potential for recruiting the required number of suitable subjects. With regard to the planned study estimate the drop-out rate.

**3.4 STATISTICAL ANALYSES**

What is the proposed strategy of statistical analysis? What is the strategy for analysing the primary outcome? If interim analyses are planned, please specify. Are there any subgroup analyses? Discuss the robustness of your results e.g. with respect to unavoidable incomplete or missing data. If high-throughput data are generated (e.g. when using micro-arrays) which methods are used to adjust for multiplicity and an inflated error of false positive results?

**3.5 ETHICAL CONSIDERATIONS**

Discuss briefly the acceptability of the risk incurred by the individual participant versus the potential benefit for the participant / population concerned. In particular in Phase I studies: What measures have been taken to detect serious adverse events immediately such that the study

can be terminated or taken on hold? What are the most important issues about which the patients have to be informed?

### 3.6 STUDY MANAGEMENT

#### 3.6.1 Clinical study expertise

Please indicate persons responsible for design, management, and analysis of the study.

#	Name	Affiliation	Responsibility / Role	Signature
			Sponsor of the study	
			Principal/Coordinating Investigator	
			Study Statistician <sup>4</sup>	

Please indicate studies expertise of all above-mentioned participants by citing relevant previous work, publications and/or specifying major role in ongoing study(s) (to be identified; max. 5 publications of the last 5 years). Ensure that the team of investigators has the necessary range of disciplines and expertise to carry out the study.

#### 3.6.2 Study-supporting facilities

Which study-specific facilities and other resources are available for conducting the study?

### 3.7 STUDY TIMELINE FLOW

As funding by BMBF will critically depend on the study progression according to the milestones, please provide a proposal of milestones reflecting planning, recruitment status and data clearing/analysis progress. Include a diagram showing trial stages and milestones.

### 3.8 FINANCIAL SUMMARY

Please give a rough estimation of the costs expected for the clinical study and the total duration of the study.

Item	Year 1-3	Total
Clinical Project Management		
Project Management: Study Design and Preparation (e.g. Statistical Planning, Protocol, Case Report Form (paper-CRF, e-CRF), Informed Consent	€	€
Case Payment	€	€
Data management, IT (e.g. Database Set-up and Validation Data Entry, Coding, Query Management)	€	€
Biometry	€	€
Quality Assurance (e.g. on-site Monitoring, Data Monitoring and Safety Committee	€	€
Travel (e.g. Study Committees, Meetings)	€	€
Reference Centres	€	€
Materials	€	€
Study Drug	€	€
Fees, Insurance	€	€

<sup>4</sup> Assure that the biostatistician has the expertise to carry out clinical studies, e.g.: GMDS certificate, <http://www.gmds.de/texte/zertifikate-weiteres.html>; ICH guidance E9 "Statistical Principles of Clinical Trials"

Equipment	€	€
Others	€	€
<b>TOTAL</b>	<b>€</b>	<b>€</b>

### 3.9 CO-FINANCING BY INDUSTRY AND/OR OTHER THIRD PARTIES

#### 3.9.1 Co-financing by industry and/or other third parties

In case of industry participation: Co-financing by industry or other third parties is at least

- 50% of the costs for a phase I study.
- 75% of the costs for a phase II study.

The application should briefly describe the type and volume of the co-financing, indicating the respective company or other third party. Details are to be specified in the study protocol:

- Describe the type and volume of support (including any services or consumables provided free of charge, e.g. drugs for the study).
- Indicate the amount of support to be provided and assure in writing that the third party will render these services, stating their terms and conditions, if any.
- Assure that the coordinating investigator is independent, in particular with regard to the analysis of the study and the publication of its results. A statement giving such assurances will be demanded by the funding organization after the review process is finished.
- Declare conflicts of interest

***Please don't make any agreements before notion of award has been made; please contact the funding organisation first! Appropriate agreements on intellectual property, confidentiality, publication of results, property rights should be concluded between all those playing a leading part in the conduct of the study. Make sure that the agreements cover ALL relevant points in detail, especially in respect to the exploitation of the results, e.g. proportion of contribution of partners reflected in patents and first as well as last authorship in publications.***

#### 3.9.2 Other funding

In case you have already submitted the same request for financial support or parts hereof to other institutions, please mention this here. Indicate those third parties which will provide funds, free services or consumables such as study medication.

If this is not the case please declare:

"A request for funding this project has not been submitted to any other addressee. In case I submit such a request I will inform the Federal Ministry of Education and Research immediately".

### 3.10 DECLARATIONS

#### 3.10.1 Sponsors declaration

The awarding of funds is linked to the condition that the institution employing the principal / coordinating investigator assumes full responsibility and all functions and obligations of the

sponsor as listed in chapter 5 of the harmonised Guideline for Good Clinical Practice of the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH GCP), notwithstanding the fact that the funding organisation provides additional external funds. In particular, appropriate agreements should be concluded with the parties conducting the study in order to ensure that the responsibility referred to above can be exercised. A corresponding declaration has to be submitted comprising the assurance that

1. the study will be conducted in accordance with the principles of ICH GCP and
2. the institution will assume the sponsor's responsibilities in accordance with chapter 5 of ICH GCP.

The text of the sponsor's declaration is available on the funding organisation's web sites ([http://www.gesundheitsforschung-bmbf.de/media/Sponsorerklaerung\\_07-07-05.pdf](http://www.gesundheitsforschung-bmbf.de/media/Sponsorerklaerung_07-07-05.pdf)). Please use this text for your declaration, which must be duly signed by a representative of the employing institution and the principal / coordinating investigator. The sponsor's declaration should be joined to the application.

### **3.11 STUDY PROTOCOL**

Please provide one complete study protocol.