## Preface

This template is based on the "Guidelines for the submission of documentation for single technology assessment (STA) of pharmaceuticals", and will be maintained up-to-date with the latest valid version of the guidelines. The template is by no means exhaustive; it is therefore necessary to adhere to the current version of the guidelines alongside using this template when preparing the documentation for STA of pharmaceuticals.

The template must be followed for the compiling and submission of documentation for all STAs of pharmaceuticals that are relevant for reimbursement by public authorities.

In some cases it will not be necessary to provide documentation on all listed items in the guidelines. Such cases are generally specified in the individual chapters of this template. In cases where it applies, the headline must then be kept and reasons for why the section is not completed in the submission should be briefly stated. Formatting the document itself is optional.

Example: If the documentation submitted is for the purpose of supporting a cost-minimisation analysis, it will usually not be necessary to calculate severity. There will be standard requirements for documentation that efficacy and safety profile are approximately the same for both the intervention and comparator. This means that systematic literature searchs will typically be required for relative efficacy, but not for the health state utility values (HSUV).

Documentation should be submitted according to the order from the Ordering Forum/Norwegian Medicines Agency. If this is not the case, it must be clarified in advance with the Norwegian Medicines Agency. All communications must go through the Norwegian Medicines Agency, both when publicly-funded pharmaceuticals and pharmaceuticals financed by the regional health authorities is concerned (the applicants should not contact directly the Ordering Forum/ regional health authorities).

Where the template shows "example of table", the Norwegian Medicines Agency remains open to other layouts of the table if it can provide a clearer and additional relevant information.

Clarification regarding the requirements for performing literature search:

Literature search must be performed when key input data in the model is retrieved from the literature and is used to justify the selection of the current input. The literature search must be performed systematically as described in this document and in the Guidelines.

[The text on this page must be deleted.]

[The text highlighted in gray is a guide to completion, and is deleted after the template has been filled in.]

## Table of Contents

[Insert Table of Contents]

## Glossary of terms

[Insert relevant key words]

|  |  |
| --- | --- |
| Abbreviation / term | Definition  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Overview 1 – Formalities pertaining to this order

[The table below must be completed]

|  |  |
| --- | --- |
| Company Name | Company namePostal address |
| Contact person for this assessment | Name, phone number and e-mail address |
| Consulting firm commissioned |  |
| Brand / trade name |  |
| Active substance |  |
| ATC code |  |
| Order ID-number |  |
| Title of the order  |  |
| Indications (all) |  |
| Relevant indication(s) for this STA |  |
| Does the submitted documentation differ from the order? | Yes – How? / No |
| Has the intervention been previously assessed by NoMA for this indication or another indication? | Case number:  |
| Conditional approval for market authorisation | Yes / No |
| Pharmaceutical form / method of administration and posology |  |
| Required additional tests / medication | Diagnostic? Screening? Eventual co-medication? |
| Patient population in Norway the indication applies to(5-year prevalence) |  |
| Budget Impact in years 1-5 | Calculated based on the maximum pharmacy retail price (PRP)Years 1 - 2 - 3 - 4 - 5 |
| Clinicians who have been contacted \* | Name, workplace |
| Key-opinion leaders (KOL) that have been contacted \*  | Name, workplace |
| Has the intervention been reimbursed/publically financed/ used in Norway before? (Estimated number of patients annually, turnover NOK) | Sales (calculated on the basis of max PRP) |

\* Indicate as reference in the text and in the reference list where statements/assumptions from clinicians/KOL have been used.

## Overview 2 – Health Economic Analysis

[The table below must be completed]

|  |  |
| --- | --- |
| Type of economic analysis that is submitted (cost-utility analysis, cost-minimising analysis, etc.) |  |
| Relative efficacy documentation is based mainly on:(head-to-head, paired indirect comparisons, ITC, MTC, NMA, MAIC STC, naive unadjusted indirect comparisons, etc.) | Specify |
| Is it offered at a lower price than the maximum pharmacy purchase price (PPP) (if applicable)? |  |
| Selected comparators (can be more than one) | Active substance and brand name  |
| Results of the health economic analysis (report by subgroups if evaluated and submitted) | ICER (costs per QALY):Cost-minimising analysis: |
| Absolute shortfall (AS) |  |

## Scope

[Describe and complete according to the guidelines, Chapter 2.]

[Provide a brief description of the indication the STA is concerned with, the patient population relevant for the STA, the intervention (the pharmaceutical). Provide a list of the comparators (alternative treatment/pharmaceuticals)]

[Text]

[Briefly describe which health economic analysis methodology has been used (cost per QALY analysis, cost-minimisation analysis, etc.) and what outcomes have been used in the assessment.]

[Text]

## Description of the pharmaceutical and its intended use

[Describe and complete according to the guidelines, Chapters 3.1, 3.2, 3.3]

### 1) The disease and the pharmaceutical's position in Norwegian clinical practice

[Describe briefly the disease or condition to be evaluated.]

[Text]

[Describe the Norwegian clinical practice and the pharmaceutical’s positioning in a medical algorithm. Illustrate with a diagram.]

[Text, diagram]

[Which treatment options are currently available to the patient population for which the assessment applies to? In what way can the introduction of the pharmaceutical eventually change clinical practice?]

[Text]

[Describe the prevalence and incidence of the disease / condition in Norway if possible.]

[Text]

[Enter the developments for the past 5 years in the table below.]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2014 | 2015 | 2016 | 2017 | 2018 |
| Incidence in Norway |  |  |  |  |  |
| Prevalence in Noway |  |  |  |  |  |
| Global prevalence \*  |  |  |  |  |  |

\*For particularly small patient groups, also describe the worldwide prevalence

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2018 | 2019 | 2020 | 2021 | 2022 |
| Patients currently in Norway who are expected to use the pharmaceutical |  |  |  |  |  |

[Provide the source(s) the information in the tables is based on.]

Source: [Text]

### 2) Description of the intervention

Pharmaceutical form: [Text]

Posology: [Text]

Method of administration: [Text]

Should the pharmaceutical be administered with other medicines?: [Text]

Treatment duration / Criteria for end of treatment: [Text]

Necessary monitoring, both during administration and during the treatment period: [Text]

Need for diagnostic or other test: [Text]

[Describe in addition (max 5 lines) if the intervention (pharmaceutical) has a benefit of clinical significance when compared to relevant alternatives. How large is the proportion of the patient group that is expected to attain this benefit from the pharmaceutical?]

 [Text]

### 3) Patient population relevant for the assessment

[Describe as accurately as possible the patient population that is expected to use the pharmaceutical in Norway and estimate the number of patients relevant for this assessment.]

[Text]

[Describe which age groups are principally affected by the disease, and indicate the mean age (median age if relevant) for the patient group that is currently eligible for treatment in Norway (not the age for potential study population(s)). This age should be supported by clinical experts, registry data or other relevant sources.]

[Text]

[Are there any subgroups of patients where the pharmaceutical is expected to have a different efficacy and safety than anticipated for the entire population that the STA applies to? Please feel free to present this in your own section here. Provide a rationale for the group selection and indicate whether these subgroups were pre-defined (and how) in the clinical trials. Briefly describe any diagnostic tests and methods used for patient selection. Any subgroup analyses must be reported according to this template in a separate attachment.]

[Company-specific Appendices]

### 4) Selection of comparator(s)

[The selection of comparator(s) must be done in accordance with the guidelines, Chapter 3.4.]

[Describe and explain which pharmaceutical or treatment would primarily be replaced by the introduction of this intervention] [Provide a reason if the chosen comparator is not currently in Norwegian clinical practice as described above.] [Text]

[Does the analysis submitted have multiple comparators - which? See Guidelines, Chapter 3.4.2, 3.4.3, 3.4.4.]

[Text]

### 5) Description of the comparator(s)

Pharmaceutical form: [Text]

Posology: [Text]

Method of administration: [Text]

Should the pharmaceutical (or other method) be administered with other medicines?: [Text]

Treatment duration / Criteria for end of treatment: [Text]

Necessary monitoring, both during administration and during the treatment period: [Text]

Need for diagnostic or other test: [Text]

## Efficacy studies – Documentation for the intervention’s clinical efficacy

[Follow Chapter 5 of the Guidelines.]

[Describe in text or table form the most important patient characteristics that exert an influence on clinical response (effect modifiers (EM) and prognostic factors (PF)). This is particularly relevant if indirect comparisons have been made, but it may also be important in some cases where studies used direct comparisons.]

[Text]

Example of table:

|  |  |  |
| --- | --- | --- |
| Important patient characteristics(EM/PF) | Description (how / in which direction is the clinical response affected) | Additonal comments |
| E.g. Age  | Lower age – Pharmaceutical A provides a better effect.  | Does not seem to occur with the comparator (Pharmaceutical B) |
| E.g. Disease stage |  |  |
| E.g. ECOG status |  |  |
| EFM/PF 4 |  |  |
| EFM/PF 5 |  |  |
| Etc. |  |  |

[Report the pivotal studies, along with other relevant studies demonstrating the clinical efficacy of the intervention regardless of whether or not they have been used in the model. Complete the tables below prepared for this purpose. Results for the primary endpoints, as well as secondary endpoints, which have been used in the health economic model, must be presented according to the tables below.]

### Marketing authorisation (MA) studies

[Table for market authorisation study 1]

|  |  |
| --- | --- |
| Study 1 | (Title, authors, year, reference) |
| Sample size (n) |  |
| Study design |  |
| Patient population |  |
| Intervention(s) |  |
| Comparator(s) |  |
| Follow-up period |  |
| Is the study used in the health economic model? | Yes/No |
| Reasons for use / non-use of the study in model |  |
| Primary endpoints reported\* include results | Indicate those that have been included in the model  |
| Other outcomes reported \* include results | Indicate those that have been included in the model \*\* |

\* Provide a definition for the endpoints when relevant

\*\* Explain why these are more relevant for the assessment if they replace the primary endpoints of the study

[In addition, please provide a description in text form if there is any important information not suitable for presentation in a table (e.g. purpose of the study, inclusion criteria, exclusion criteria, etc.).]

[Text]

[Table for market authorisation study 2]

|  |  |
| --- | --- |
| Study 2 | (Title, authors, year, reference) |
| Sample size (n) |  |
| Study design |  |
| Patient population |  |
| Intervention(s) |  |
| Comparator(s) |  |
| Follow-up period |  |
| Is the study used in the health economic model? | Yes/No |
| Reasons for use / non-use of the study in model |  |
| Primary endpoints reported\* include results | Indicate those that have been included in the model  |
| Other outcomes reported \* include results | Indicate those that have been included in the model \*\* |

\* Provide a definition for the endpoints when relevant

\*\* Explain why these are more relevant for the assessment if they replace the primary endpoints of the study

[In addition, please provide a description in text form if there is any important information not suitable for presentation in a table (e.g. purpose of the study, inclusion criteria, exclusion criteria, etc.).]

[Text]

[Additional tables for other relevant market authorisation studies (optional)]

### Other relevant studies

[Table for other study 3]

|  |  |
| --- | --- |
| Study 3 | (Title, authors, year, reference) |
| Sample size (n) |  |
| Study design |  |
| Patient population |  |
| Intervention(s) |  |
| Comparator(s) |  |
| Follow-up period |  |
| Is the study used in the health economic model? | Yes/no |
| Reasons for use / non-use of the study in model |  |
| Primary endpoints reported\* include results | Indicate those that have been included in the model  |
| Other outcomes reported \* include results | Indicate those that have been included in the model \*\* |

\* Provide a definition for the endpoints when relevant

\*\* Explain why these are more relevant for the assessment if they replace the primary endpoints of the study

[In addition, please provide a description in text form if there is any important information not suitable for presentation in a table (e.g. purpose of the study, inclusion criteria, exclusion criteria, etc.).]

[Text]

[Additional tables for other relevant studies (optional)]

## Efficacy studies – Documentation for the comparator’s clinical efficacy

[Follow Chapter 5 of the Guidelines]

[Describe in text or table the most important patient characteristics that exert an influence on clinical response (effect modifiers (EM) and prognostic factors (PF)). This is particularly relevant if indirect comparisons have been used, but it may also be important in some cases where studies used direct comparisons.]

[Text]

Example of table:

|  |  |  |
| --- | --- | --- |
| Important patient characteristics(EM/PF) | Description (how / in which direction is the clinical response affected) | Additonal comments |
| E.g. Age  |  |  |
| E.g. Disease stage |  |  |
| E.g. ECOG status |  |  |
| EFM/PF 4 |  |  |
| EFM/PF 5 |  |  |
| Etc. |  |  |

[Report the relevant studies that show the clinical efficacy of the comparator regardless of whether or not they have been used in the model. Complete the tables below prepared for this purpose. Results for the primary outcomes, as well as secondary outcomes, which have been used in the health economic model, must be presented according to the tables below.]

### Relevant studies

[Table for relevant study 1]

|  |  |
| --- | --- |
| Studie 1 | (Title, authors, year, referanse) |
| Sample size (n) |  |
| Study design |  |
| Patient population |  |
| Intervention(s) |  |
| Comparator(s) |  |
| Follow-up period |  |
| Is the study used in the marketing authorisation application for the comparator? | Yes/No |
| Is the study used in the health economic model? | Yes/No |
| Reasons for use / non-use of the study in model |  |
| Primary endpoints reported\* include results | Indicate those that has been included in the model |
| Other outcomes reported \* include results | Indicate those that has been included in the model \*\* |

\* Provide a definition for the endpoints when relevant

\*\* Explain why these are more relevant for the assessment if they replace the primary endpoints of the study

[In addition, please provide a description in text form if there is any important information not suitable for presentation in a table (e.g. purpose of the study, inclusion criteria, exclusion criteria, etc.).]

[Text]

[Table for relevant study 2]

|  |  |
| --- | --- |
| Studie 2 | (Title, authors, year, reference) |
| Sample size (n) |  |
| Study design |  |
| Patient population |  |
| Intervention(s) |  |
| Comparator(s) |  |
| Follow-up period |  |
| Is the study used in the marketing authorisation application for the comparator? | Yes/No |
| Is the study used in the health economic model? | Yes/No |
| Reasons for use / non-use of the study in model |  |
| Primary endpoints reported\* include results | Indicate those that has been included in the model |
| Other outcomes reported \* include results | Indicate those that has been included in the model \*\* |

\* Provide a definition for the endpoints when relevant

\*\* Explain why these are more relevant for the assessment if they replace the primary endpoints of the study

[In addition, please provide a description in text form if there is any important information not suitable for presentation in a table (e.g. purpose of the study, inclusion criteria, exclusion criteria, etc.).]

[Text]

## Ongoing studies for the intervention

Example of table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Title of the study and RCT (clinical-trials.gov) | Objective of the study(patient pop., etc.) | Intervention | Comparator | Outcome | Starting date | Expected end date |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## Relative efficacy

[Chapter 6.1 of the Guidelines must be followed.]

[The documentation below is usually based on a systematic literature search which must be reported in Appendix A. When a head-to-head study with a comparator relevant in Norwegian clinical practice already exists, literature search can in some cases be omitted.]

[Specify which documentation the relative efficacy is based on and elaborate on whether direct comparisons, paired indirect comparisons, ITC or other method was used. Explain what the underlying studies are and why they have been selected.]

[Text]

### Results from head-to-head studies

[If only one head-to-head study is used: explain why it is not necessary to include other studies from the literature / systematic literature search or perform indirect comparisons (for example, there may be systematic reviews for the comparator where results differ from those reported in the head-to-head study).]

[Text]

[When the relative efficacy documentation is based on a head-to-head study between the intervention and a comparator, it must be presented in this chapter. Tables may be used for clarification.]

[If intermediate outcomes (or surrogate endpoints) are used in the model, to what extent they are related to the primary endpoints must be described. Explain how the relationship has been estimated and what evidence it is based on.]

[Text]

[Extrapolation of data should be described under the section below entitled "Extrapolation of relative efficacy."]

### Results from indirect comparison

[When the relative efficacy documentation is based on an indirect comparison, the main results should be summarised in this chapter. Tables may be used if for clarification.]

[The complete methodology should be described in detail in Appendix B/separate attachment.]

[If intermediate outcomes (or surrogate endpoints) are used in the model, to what extent they are related to the primary endpoints must be described. Explain how the relationship has been estimated and what evidence it is based on.]

[Extrapolation of data should be described under the section below entitled "Extrapolation of relative efficacy."]

## Extrapolation of relative efficacy

[Follow Chapter 6.2 and Appendix 2 of the Guidelines.]

[If the extrapolation is not based on the time-to-event data (i.e. survival data), please explain and justify any assumptions made on how the effect differs beyond the study period. Does the effect remain the same, decrease, increase?]

[Text]

### Time to event data – summarised:

[If extrapolations from time-to-event data have been made, please present the full method used and results in Appendix C Parameterisation.]

[Specify which parametric function was selected for both intervention and comparator.]

[Text]

[Graphical representation of the time to event data curves where both the Kaplan-Meier (KM) data and the parametric distributions are shown in the same figure must also be presented in this section (for both intervention and comparator). Specify whether corrections have been made for treatment switch/ cross over (intervention and/or comparator).]

[Figure, text]

## Safety – intervention and comparator

[Follow Chapter 5.3. of the Guidelines.]

[Present adverse reactions in a table (see example below) while using the intervention and comparator(s) in the studies described above. Include the adverse reactions that are relevant to the assessment. This will usually be frequent, common and serious adverse reactions (for example, those identified as "important identified" in the risk management plans.)]

Example of table: Overview of adverse reactions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Frequency of adverse reactions | Study 1 | Study 2 | Study 3 | Is the adverse reaction referred to as "important identified"? Yes/No | Is the adverse reaction included in the model? Yes/No |
| **Intervention** |  |  |  |  |  |
| Name of adverse reaction 1 |  |  |  |  |  |
| Name of adverse reaction 2 |  |  |  |  |  |
|  |  |  |  |  |  |
| **Comparator** |  |  |  |  |  |
| Name of adverse reaction 1 |  |  |  |  |  |
| Name of adverse reaction 3 |  |  |  |  |  |
|  |  |  |  |  |  |

[How adverse reactions are handled in clinical practice (monitoring, follow-up, resource use, etc.) should not be described here, but instead under the section "Resource use and costs."]

Name of adverse reaction 1

[Describe how the adverse reaction 1 affects the health-related quality of life.]

[Text]

[Explain why the adverse reaction 1 is or is not included in the health economic model.]

[Text]

[Describe how this adverse reaction has been accounted for in the model, for example with a reduced quality of life and/or as an additional a cost. The actual change in HSUV or cost estimate must be presented under the section "Documentation on Health-related quality of life" and the section "Resource use and costs."]

[Text]

Name of adverse reaction 2

[Describe how the adverse reaction 2 affects the health-related quality of life.]

[Text]

[Explain why the adverse reaction 2 is or is not included in the health economic model.]

[Text]

[Describe how this adverse reaction has been accounted for in the model, for example with a reduced quality of life and/or as an additional a cost. The actual change in HSUV or cost estimate must be presented under the section "Documentation on Health-related quality of life" and the section "Resource use and costs."]

[Text]

Name of adverse reaction 3

[Describe how the adverse reaction 3 affects the health-related quality of life.]

[Text]

[Explain why the adverse reaction 3 is or is not included in the health economic model.]

[Text]

[Describe how this adverse reaction has been accounted for in the model, for example with a reduced quality of life and/or as an additional a cost. The actual change in HSUV or cost estimate must be presented under the section "Documentation on Health-related quality of life" and the section "Resource use and costs."]

[Text]

## Documentation of health-related quality of life (HRQoL)

[Chapter 7 of the Guidelines must be followed.]

[The literature search (if conducted) must be presented in Appendix D].

### Overview of health state utility values (HSUV)

[Present in a table the different sources for the HSUV (also called QALY weights) that have been considered in the STA. This may be from the literature search (1), from the clinical studies (2) that underlie the relative efficacy in this assessment and/or from mapping (3). If the quality of life data was derived from the studies from which the relative efficacy’s documentation is based on, table (2) below must be completed. Below are also examples of three different tables. Use these (as much as it may help structure the information) as a starting point.]

Example of table (1): Overview of HSUV derived from **the literature search** (presented in Appendix D)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Results[C.I.] | Instru-ment | Tariff (value set) used | Comments |
| Health state A |
| Study 1 | 0.767 [0.71-0.83] | EQ-5D | UK | For example: No studies were found for the current patient population or for the health state, but this one represents the best approximation |
| Study 2 |  |  |  |  |
| Study 3 |  |  |  |  |
| Health state B |
|  |  |  |  |  |
| Adverse reaction A |
|  |  |  |  |  |

Example of table (2): Overview of the HSUV measured during **clinical trials** forming the basis for the relative efficacy (see section entitled "Relative efficacy")[This table must always be completed if the quality of life data came from clinical trials forming the basis for the relative efficacy]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Results [C.I.] | Instru-ment | Tariff (value set) used | Comments |
| Health state A |
| Study 1  | 0.767 [0.71-0.83] | EQ-5D | UK |  |
| Study 1  |  | DLQI |  |  |
| Study 2 |  |  |  |  |
| Health state B |
|  |  |  |  |  |
| Adverse reaction |
|  |  |  |  |  |

Example of table (3): Overview of HSUV based on **mapping** (presented in Appendix E)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Results [KI] | From the Instru-ment | To the instrument | Comments |
| Mapping |  | DLQI | EQ-5D | Is the method known from existing literature? Thoroughly describe in the appendix. |
|  |  |  |  |  |

### Health state utility values *used* in the health economic model

[The selection of HSUV used in the model must be justified.]

Justifications:

HSUV for health state A

[Text]

HSUV for health state B

[Text]

HSUV for adverse reaction A

[Text]

[If the clinical studies from which the relative efficacy’s documentation is based on (see table (2) above) include quality of life data or data that can be transformed into quality of life data and this data has not been used in the analysis, please explain why.]

Justification for not using the quality of life data from the studies: [Text]

[Describe how the HSUV have been adjusted for age. See Chapter 7.4 of the Guidelines.]

[Text]

Example of table: Summary of the HSUV *used* in the model

|  |  |  |
| --- | --- | --- |
|  | HSUV | 95% C.I. |
| Health state |
| A |  |  |
| B |  |  |
| Adverse reaction |
| A |  |  |
| B |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

[Describe the strengths and weaknesses of the quality of life data used.]

[Text]

## Relationship between the data for relative efficacy, parameters used in the model and relevance for Norwegian clinical practice

[Chapter 8 of the Guidelines must be followed.]

[The purpose of the next two chapters is to establish the context and possible deviations between the relative efficacy data used in the model, clinical data and Norwegian clinical practice.]

### Presentation of input data used in the model and how they were obtained

[Present clearly in a table what estimates (clinical effect, adverse reactions and HSUV) used in the health economic model and how these have been obtained. Present results for relevant data/outcome measures used in the model (for example, what "informs" the model). Primary outcomes must always be included in the table. Data from intention to treat (ITT) analyses should be presented if possible. When transition probabilities that were calculated from clinical data have been used, they must also be presented in the table below.]

[Describe the relevance of the selected estimates for Norwegian clinical practice.] [Text]

Example of possible table contents :

|  |  |  |  |
| --- | --- | --- | --- |
| Name of estimates\* | Results from study or indirect treatment comparison (ITC), (clarify if ITT, per-protocol (PP), safety population) | Input value used in the model | How is the input value (column 3) obtained/estimated \*\* |
| Outcome A\* |  |  |  |
| Outcome B\* |  |  |  |
| Adverse reaction 1\* (measured in costs) |  |  |  |
| Adverse reaction 2\* (measured as occurrence) |  |  |  |
| Adverse reaction 3\* (measured as utility loss) |  |  |  |
| Health state A\* (measured as utility) |  |  |  |
| Health state B\* (measured as utility) |  |  |  |
| Transition probability 1 | N.A. |  |  |
| Transition probability 2 | N.A. |  |  |
|  |  |  |  |
|  |  |  |  |

\* Some of these estimates will be presented in other tables in the document. This table is a summarry.

\*\* Calculations: [If the value used in the model were converted from results derived from studies or from an indirect treatment comparison (ITC), it must be justified and details must be provided either in this chapter or in a separate appendix (see Chapter 10.1 of the Guidelines). [Text]

### PICO - Relationship between the clinical documentation, data used in the model and Norwegian clinical practice

[The purpose of the items below (PICO) is to identify any discrepancies between the clinical data, data used in the model, and Norwegian clinical practice (if known).]

[The term "clinical data" in this section has a wider definition than data from clinical studies, and should be interpretated as (in addition to data from clinical studies) also including estimates based on indirect comparisons, real world data, etc.). ]

**PATIENT POPULATION**

Norwegian clinical practice: [Text]

Clinical documentation submitted (in relation to clinical practice): [Text]

Model submitted (according to clinical documentation and clinical practice): [Text]

[The text must be summarised in a table.]

Example of table:

|  |  |  |  |
| --- | --- | --- | --- |
| Patient populationImportant baseline characteristics | Clinical documentation / indirect comparison etc. (including source) | Used in the model (number/value includings source) | Norwegian clinical practice (including source if known) |
| BMI | 32 | 32 | 29 (estimated by Dr. Ola Nordmann) |
| ECOG status | 0-1 | 1 | 0-2 (clinical guidelines) |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

[If the information in the columns in the table does not match, it must be discussed. This should be done with respect to transferability of results to Norway.]

[Text]

**INTERVENTION**

Norwegian clinical practice: [Text]

Clinical documentation submitted (in relation to clinical practice): [Text]

Model submitted (according to clinical documentation and clinical practice): [Text]

[The text must be summarised in a table.]

Example of table:

|  |  |  |  |
| --- | --- | --- | --- |
| Intervention | Clinical documentation (including source) | Used in the model (number/value includings source) | Expected Norwegian clinical practice (including source if known) |
| Posology | 20 mg/day (study 1) | 20 mg/day (study 1) | 20 mg/day (assumed used as suggested in the Summary of product characteristics (SPC), statement from clinics) |
| Length of treatment |  |  |  |
| The pharmaceutical’s position in the Norwegian clinical practice |  |  |  |
| Etc. |  |  |  |
|  |  |  |  |
|  |  |  |  |

[If the information in the columns in the table does not match, it must be discussed. This should be done with respect to transferability of results to Norway.]

[Text]

**COMPARATOR**

Norwegian clinical practice: [Text]

Clinical documentation submitted (in relation to clinical practice): [Text]

Model submitted (according to clinical documentation and clinical practice): [Text]

[The text must be summarised in a table.]

Example of table:

|  |  |  |  |
| --- | --- | --- | --- |
| Comparator | Clinical documentation (including source) | Used in the model (number/value includings source) | Expected Norwegian clinical practice (including source if known) |
| Posology | 20 mg/day (study 1) | 20 mg/day (study 1) | 20 mg/day (assumed used as suggested in the SPC, statement from clinics) |
| Length of treatment |  |  |  |
| The comparator’s position in the Norwegian clinical practice |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

[If the information in the columns in the table does not match, it must be discussed. This should be done with respect to transferability of results to Norway.]

[Text]

**RELATIVE EFFICACY OUTCOMES**

Clinical documentation submitted (in relation to clinical practice): [Text]

Relevance of the documentation for Norwegian clinical practice: [Text]

Model submitted: [Text]

[Present here the value of parameterisation from observed data if the value (outcome measure) is generated by parameterisation.]

[The text must be summarised in a table. It is suggested to distinguish between the actual numerical values of the outcome measures, the measurement method and the relevance of outcomes.]

Example of table: Summary of text regarding ***value***

|  |  |  |
| --- | --- | --- |
| Clinical efficacy outcome | Used in the model (value) | Clinical documentation |
| Primary endpoint in the study (endpoint’s name)Blood pressureProgression free survival (PFS) | Numerical value 140 mm Hg3.8 months (extrapolated. see explanation) | Numerical value 140 mm Hg3.5 months. (Median) |
| Secondary endpoint (endpoint’s name) | Numerical value Numerical value Numerical value  | Numerical value Numerical value Numerical value  |

[If the information in the columns in the table does not match, it must be discussed. This should be done with respect to transferability of results to Norway.]

[Text]

Text example: the difference between 3.8 and 3.5 months is due to…

Example of table: Summary of text regarding ***relevance***

|  |  |  |  |
| --- | --- | --- | --- |
| Clinical efficacy outcome | Clinical documentation (measurement method) | Relevance of outcome for Norwegian clinical practice  | Relevance of measurement method for Norwegian clinical practice  |
| Primary endpoint in the study (endpoint’s name)Blood pressure |  |  |  |
| Secondary endpoint (endpoint’s name) |  |  |  |

[If the information in the columns in the table does not match, it must be discussed. This should be done with respect to transferability of results to Norway.]

[Text]

**ADVERSE REACTION OUTCOMES**

Clinical documentation submitted: [Which outcomes, text]

Model submitted: [Text]

[The text must be summarised in a table.]

Example of table:

|  |  |  |
| --- | --- | --- |
| Adverse reaction outcome | Used in the model (numerical value) | Clinical documentation |
| Stroke | 1/1000 (occurrence) | No occurrence in the study (0/200) |
|  |  |  |

[If the columns in the table are not interrelated, it must be discussed. This should be done with respect to transferability of results to Norway.]

[Text]

**HEALTH-RELATED QUALITY OF LIFE OUTCOMES**

Clinical documentation submitted: [Which outcomes, text]

Health economic model submitted: [Text]

[The text must be summarised in a table.]

Example of table:

|  |  |  |
| --- | --- | --- |
| Health-related quality of life (HRQoL) outcome | Used in the model (numerical value) | Documentation (literature search, study, ITC) |
| Health state A | HSUV |  |
| Health state B |  |  |
| Health state C |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Health economic analysis and model

[Chapters 9 and 10 of the Guidelines must be followed.]

### Health economic analysis

[Describe which type of health economic analysis has been used (CUA, cost-minimisation analysis, etc.). In the event that a cost-minimisation analysis was conducted, not all of the following items will be relevant.]

[Text]

[In all models submitted (for example, in spreadsheets) the input data sources in the model must also be included in the attached spreadsheet.]

### Model

[Describe the model (see Chapter 10 of the Guidelines) and depict the structure of the model clearly showing the different stages and the main features of how it works. Explain to what degree the model is appropriate for analysing the research question of the STA.]

[Text]

[Figure]

[Describe and justify the choice of time horizon (see Chapter 10.3 of the Guidelines).]

[Text]

[Enter the different discount rates for costs and benefits (QALYs) respectively.]

[Text]

[Describe how the model has been validated. Refer to the relevant publication(s) if external validation has been performed (see Chapter 10 of the Guidelines).]

[Text]

[Describe and justify key assumptions in the model.]

[Text]

### Ressource use and costs

[Follow Chapter 9.3 of the Guidelines.]

[In this section, present the various costs used in the model. The *treatment* of adverse reactions in clinical practice (monitoring, follow-up, resource use, etc.) should also be presented here.]

Example of table: Costs used in the model

|  |  |
| --- | --- |
| Costs | NOK (per unit of measurement used in the model) |
| A- e.g. hospitalisation | NOK (per admission) |
| B- e.g. drug cost | NOK (per time period /patient) |
| C- e.g. blood glucose strips | NOK (per year) |
| D- e.g. health state A cost  | NOK (per cycle) |
| E- e.g. monitoring of INR |  |
| F- e.g. adverse reaction liver failure |  |
| G- e.g. patients' time spent in treatment |  |
| H- e.g. end of life costs |  |

[Describe each cost in its own section below, including resource use, unit costs (consult, if applicable, the unit cost database at www.legemiddelverket.no) and how it was included in the model. Describe the use of resources in clinical practice for each cost. Show the calculations and cite the sources.]

Cost A (e.g. hospitalisation)

Resource use for cost A: [Text] [Clinical practice, what monitoring is required, resource use.]

Unit cost(s) for cost A: [Text]

Value used in the model for cost A: [Text] [Must be given as cost per unit, e.g. per admission, per cycle, for any projection, see Chapter 9.3.3 in the Guidelines).]

Cost B (e.g. liver failure (adverse reaction X))

Resource use for cost B: [Text] [Clinical practice, what monitoring is required, resource use.]Unit cost(s) for cost B: [Text]

Value used in the model for cost B: [Text] [Must be given as cost per unit, e.g. per admission, per cycle, for any projection, see Chapter 9.3.3 in the Guidelines).]

## Results

### Base case results

[Complete the table. The text in column 1 should be customised for each individual assessment. The results for the intervention and comparator as well as the difference must always be presented.]

Example of table:

|  |  |  |  |
| --- | --- | --- | --- |
| **Per patient** | **Intervention** | **Comparator** | **Difference** |
| **Life years gained**  |
| Total life years gained |  |  |  |
| Life years gained (health state A) |  |  |  |
| Life years gained (health state B) |  |  |  |
|  |  |  |  |
| **QALYs** |
| Total QALYs  |  |  |  |
| QALYs (state A) |  |  |  |
| QALYs (state B) |  |  |  |
| QALYs (adverse reactions) |  |  |  |
|  |  |  |  |
| **Costs**  |
| Total costs  |  |  |  |
| Drug costs |  |  |  |
| Administrative costs  |  |  |  |
| Hospital admissions  |  |  |  |
| End of life costs |  |  |  |
| Adverse reactions |  |  |  |
| Other costs |  |  |  |
|  |
| **Incremental results** | Intervention vs. Comparator |
| ICER (per QALY) |  |
| ICER (per life year gained) |  |
| ICER (PSA, per QALY) |  |
| Net monetary benefit (NMB) (if applicable) |  |

### Sensitivity Analyses

[Chapter 12 of the Guidelines must be followed.]

**DETERMINISTIC SENSITIVITY ANALYSES**

[Present in a table the results obtained from deterministic one-way sensitivity analyses]

Example of structure and content in table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Change | Reason / Rational / Source | Incremental cost (NOK) | Incremental benefit (QALYs) | ICER (NOK/QALY) |
| Base case |  |
| Efficacy outcome A intervention |  |  |  |  |  |
| Efficacy outcome B intervention |  |  |  |  |  |
| Hazard Ratio (HR)Overall Survival (OS) | 0.71 | Lower C.I. |  |  |  |
| 1.83 | Upper C.I |  |  |  |
| Risk of hospitalisation |  |  |  |  |  |
| Adverse reaction A |  |  |  |  |  |
| Drug costs of comparator | 30 % down |  |  |  |  |
| 50 % down |  |  |  |  |
| Time horizon |  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Discounting | 0 % |  |  |  |  |
| 6 % |  |  |  |  |
| Administrative costs | 500 | 50 % down |  |  |  |
| 1500 | 50 % up |  |  |  |
| QALY-weight (state A) | 0.52 | Alt. source 1 |  |  |  |
| 0.67 | Alt. source 2 |  |  |  |
| Etc. |  |  |  |  |  |
|  |  |  |  |  |  |

[If there is a need for longer justifications/descriptions, provide them in text form.]

[Text]

[Present tornado diagram.]

[Figure]

[Present in a table and/or in a graph all ICERs estimated with different values for the drug price of the intervention. Varying from 100% (max PRP) and to as low as to where the curve crosses the x axis (where the ICER becomes negative).]

[Table and/or price/ICER curve.]

[Describe if conducted, two-way, multi-way and/or scenario analyses and present their results when appropriate in a table.]

[Text, if applicable table]

**PROBABILISTIC SENSITIVITY ANALYSES**

[Show in a table which data/assumptions (expected value and standard error) that form the basis for the selected probability distributions used in the probabilistic analysis.]

[The table below may be copied directly from the model (such as the spreadsheet). It must be stated where in the model the assumptions for the probabilistic analysis are found. These assumptions can either be referred to in the table or described in text.]

Example of structure and content of table:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Expected value  | Standard error | Reason / Rational / Source | Probability distribution | Parameter Distribution (Name: Value) | Parameter Distribution (Name: Value) | Refers to cell (in the excel model) |
| Probabilities |
| Efficacys Outcome A | 0.72 | se 0.06 |  | Beta | α: 165 | β: 78 | Prob\_dists!C43 |
|  | 0.89 | se 0.07 |  | Beta | α: 95 | β: 8 | Prob\_dists!C44 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| HSUV  |
| State A | 0.79 | se 0.012 |  | Beta | α: 1112 | β: 301 | Prob\_dists!C133 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Costs |
| State A | 20 256 |  |  | Gamma | α: 4 | β: 5613 | Prob\_dists!C248 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

[If there is a need for longer justifications/descriptions, provide them in text.]

[Text]

[Present the PSA analyses according to Chapter 12.2.2 of the Guidelines (Scatter plot, CEAC, EVPI, and if relevant EVPPI)]

[Text, table, figure]

## Severity

[Follow Chapter 11 of the Guidelines.]

[Enter the sources used to estimate the mean age of the patient group. Use Appendix F.]

[The example below is a general table for reporting severity calculation. It is made in particular for the calculation of the absolute shortfall (AS) of the treatment alternatives evaluated in a model using a lifelong perspective. If other considerations need to be taken into account (for example, that the model cannot estimate the lifelong prognosis, that the prevention of one or more diseases is concerned, comorbidities, etc.), the table below will likely not suffice and it will often be necessary to present this in another way. The table below serves only as an example. Please refer to Chapter 11 and Appendix 4 of the Guidelines.]

[Complete the table below.]

|  |  |  |
| --- | --- | --- |
| Average age at the start of treatment | A | XX |
| Expected remaining QALYs (undiscounted) for the general population without the disease  | QALYsA | XX |
| Expected remaining QALYs (undiscounted) for those with the disease and without the new treatment (that is, prognosis of patients treated with current standard treatment)) | PA | XX |
| *If adjustments are made:* Expected remaining QALYs (undiscounted) for those with the disease without the new treatment (prognosis) - adjusted.*If adjustments are not made, this line in the table can be deleted*  | P\*A | XX |
| Number of QALYs lost due to disease (absolute shortfall) | AS | XX |

Calculation of severity based on current treatment predict an absolute shortfall of approx. XX QALY.

## Budget impact

[Chapter 13 of the Guidelines must be followed.]

[The calculations must be delivered in spreadsheets and the assumptions and sources for patient number estimates and market developments in the budget calculations must be described. Select the relevant option – either that is relevant between A/B or C/D/E.]

- [The budgetary calculations for out-patient pharmaceuticals under consideration for pre-approved reimbursement are described under sections A and B. Section A must always be prepared. While section B must be prepared unless the company can demonstrate that the budgetary consequences related to these costs are negligible or negative (e.g. the impact on these costs by themselves result in budget savings).]

- [Budgetary calculations for technology assessments of hospital pharmaceuticals are described under C, D, and E. The section C must always be prepared. While sections D and E must be prepared unless the company can demonstrate that the budgetary consequences related to these costs are negligible or negative (e.g. the impact on these costs by themselves result in budget savings).]

### Technology assessments for pre-approval for reimbursement for out-patient pharmaceuticals

- [The budget impact on the drug budget of the National Insurance Scheme (“folketrygdens legemiddelbudsjett”) must be described under A.]

- [The budget impact on the health and care services overall must be described under B.]

### A – Budgetary consequences on the drug budget of the National Insurance Scheme

[The tables below demonstrate how the calculation of additional expenses for the drug budget of the National Insurance Scheme’s should be presented.]

**Number of patients**

Table 1: Number of patients that are expected to be treated over the next five-year period - if the pharmaceutical is pre-approved for reimbursement.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the pharmaceutical under consideration \* |  |  |  |  |  |
| Competitive pharmaceutical 1 \* |  |  |  |  |  |
| Competitive pharmaceutical 2 \* (etc.) |  |  |  |  |  |

\* Patients receiving a pharmaceutical financed through individual reimbursement are excluded from the calculation

Table 2: Number of patients expected to be treated during the next five-year period - if the pharmaceutical is NOT pre-approved for reimbursement.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the pharmaceutical under consideration \* | 0 | 0 | 0 | 0 | 0 |
| Competitive pharmaceutical 1 \*\* |  |  |  |  |  |
| Competitive pharmaceutical 2 \*\* (etc.) |  |  |  |  |  |

\* Patients receiving a pharmaceutical financed through individual reimbursemeent are excluded from the calculation. Therefore, the number of patients receiving the pharmaceutical under consideration is set to zero in this scenario.

\*\* Patients receiving a pharmaceutical financed through individual reimbursement are excluded from the calculation

**Expenditure per patient**

Table 3: Drug expenditureper patient per year - if the pharmaceutical is pre-approved for reimbursement.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the competing pharmaceuticals, down the table |  |  |  |  |  |
|  |  |  |  |  |  |

Table 4: Drug expenditureper patient per year - if the pharmaceutical is NOT pre-approved for reimbursement.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| For the drug under consideration, the expenditure for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the competing pharmaceuticals, down the table |  |  |  |  |  |
|  |  |  |  |  |  |

**Budget Impact**

Table 5: The expected budget impact of the pharmaceutical pre-approved for reimbursment at the current indication.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| The pharmaceutical under consideration receives pre-approval for reimbursement  | X1 | X2 | X3 | X4 | X5 |
| Minus:The pharmaceutical under consideration does not receive pre-approval for reimbursement  | Y1 | Y2 | Y3 | Y4 | Y5 |
| **= Budget impact of the recommendation** | **X1 - Y1** | **X2 – Y2** | **X3 -Y3** | **X4 – Y4** | **X5 –Y5** |

### B – Budgetary consequences for the health and care services (overall)

[The tables below show how the calculation of cost components other than drug expenditure for the National Insurance Scheme should be presented.]

**Number of patients**

[If the number of patients relevant for this section (B) differs from the number of patients specified in A, the updated patient number estimate must be presented here. This may apply, for example, in cases where some patients that are using a treatment other than the pharmaceutical treatment must also be included in the budget calculations.]

**Expenditure per patient**

Table 6: Expenditure per patient per year by cost component (related cost components other than the drug expenditure for the National Insurance Scheme) - if the pharmaceutical under consideration is pre-approved for reimbursement.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Cost A for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| Cost A for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the Cost B, C, D, etc., down the table  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 7: Expenditure per patient per year by cost component (related cost components other than the drug expenditure for the National Insurance Scheme) - if the pharmaceutical under consideration is NOT pre-approved for reimbursement.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Cost A for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| Cost A for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the Cost B, C, D, etc., down the table  |  |  |  |  |  |
|  |  |  |  |  |  |

**Budget Impact**

Table 8: Expected budget impact of the pharmaceutical pre-approved for reimbursement at the current indication.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| **The pharmaceutical under consideration is granted pre-approved reimbursement:** | X1 | X2 | X3 | X4 | X5 |
| Of which: Drug expenditure for the National Insurance Scheme |  |  |  |  |  |
| Of which: Other related costs in the ealth and care services  |  |  |  |  |  |
| **Minus:The pharmaceutical under consideration is not granted pre-approved reimbursement.**  | Y1 | Y2 | Y3 | Y4 | Y5 |
| Of which: Drug expenditure for the National Insurance Scheme |  |  |  |  |  |
| Of which: Other related costs in the health and care services |  |  |  |  |  |
| **= Budget impact of the decision/recommendation** | **X1 - Y1** | **X2 – Y2** | **X3 -Y3** | **X4 – Y4** | **X5 –Y5** |

### Technology assessments for hospitals pharmaceuticals (in «Nye metoder»)

* [The budgetary consequences for the specialist healthcare drug budget are described under C.]
* [The budgetary consequences for other related costs for the specialist health services overall (excluding drug cost in specialist health care) are described under D.]
* [The budgetary consequences for other related costs for the health and care services overall (excluding the specialist health services) are described under E.]

### C - Budgetary consequences for the specialist health services drug budget

[The tables below demonstrate how the calculation of additional expenses for the specialist health services drug budget can be done.]

**Number of patients**

Table 9: Number of patients expected to be treated over the next five-year period - if the pharmaceutical is introduced.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the pharmaceutical under consideration \* |  |  |  |  |  |
| Competitive pharmaceutical 1 \* |  |  |  |  |  |
| Competitive pharmaceutical 2 \* (etc.) |  |  |  |  |  |

\* Patients receiving a pharmaceutical financed through individual reimbursemeent are excluded from the calculation.

Table 10: Number of patients expected to be treated in the next five-year period - if the pharmaceutical is NOT introduced.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the pharmaceutical under consideration \* | 0 | 0 | 0 | 0 | 0 |
| Competitive pharmaceutical 1 \*\* |  |  |  |  |  |
| Competitive pharmaceutical 2 \*\* (etc.) |  |  |  |  |  |

\* Patients receiving a pharmaceutical financed through individual reimbursemeent are excluded from the calculation. Therefore, the number of patients receiving the pharmaceutical under consideration is set to zero in this scenario.

\*\* Patients receiving a pharmaceutical financed through individual reimbursement are excluded from the calculation

**Expenditure per patient**

Table 11: Drug expenditure per patient per year - if the pharmaceutical is introduced.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the competing drugs, down the table |  |  |  |  |  |
|  |  |  |  |  |  |

Table 12: Drug expenditure per patient per year - if the pharmaceutical is NOT introduced.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| For the drug under consideration, drug expenditurefor the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the competing drugs, down the table |  |  |  |  |  |
|  |  |  |  |  |  |

### D – Budgetary consequences for the specialist health services (overall)

[The tables below demonstrate how the calculation of aggregated cost components other than the drug expenditure for specialist health services can be done.]

**Number of patients**

[If the number of patients relevant to this section (D) differs from the number of patients specified in C, the updated patient number estimate must be presented here. This may apply, for example, in cases where some patients that are using a treatment other than pharmaceutical treatment must also be included in the budget calculations.]

**Reimbursement per patient**

Table 13: Expenditure per patient per year by cost component (related cost components for specialist health services other than the drug expenditure) - if the pharmaceutical is introduced

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Cost A for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| Cost A for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the Cost B, C, D, etc., down the table  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 14: Expenditure per patient per year by cost component (related cost components for specialist health services other than the drug expenditure) - if the pharmaceutical is NOT introduced

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Cost A for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| Cost A for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the Cost B, C, D, etc., down the table  |  |  |  |  |  |
|  |  |  |  |  |  |

### E – Budgetary consequences for the health and care services (overall)

[The tables below show how the calculation of related aggregated cost components other than drug expenditure for the Health and Care Services (excluding the specialist health services) can be done.]

**Number of patients**

[If the number of patients relevant to this part (E) differs from the number of patients specified in C, the updated patient number estimate must be presented here. This may apply, for example, in cases where some patients that are using a treatment other than pharmaceutical treatment must also be included in the budget calculations.]

**Reimbursement per patient**

Expenditure of drugs financed through individual reimbursement must not be included.

Table 15: Expenditure per patient per year by cost component (related cost components in the health and care services excluding specialist health care services) - if the pharmaceutical is introduced

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Cost A for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| Cost A for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the Cost B, C, D, etc., down the table  |  |  |  |  |  |
|  |  |  |  |  |  |

Table 16: Expenditure per patient per year by cost component (related cost components in the health and care services excluding specialist health care services) - if the pharmaceutical is NOT introduced

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Cost A for the cohort that starts treatment in year 1 | XXX | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 2 |  | XXX | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 3 |  |  | XXX | XXX | XXX |
| Cost A for the cohort that starts treatment in year 4 |  |  |  | XXX | XXX |
| Cost A for the cohort that starts treatment in year 5 |  |  |  |  | XXX |
|  |  |  |  |  |  |
| And complete in a similar fashion for the Cost B, C, D, etc., down the table  |  |  |  |  |  |
|  |  |  |  |  |  |

**Budget impact**

Table 17: Expected budget impact of introducing the pharmaceutical at the current indication.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
| **The pharmaceutical under consideration is introduced**  | **X1** | **X2** | **X3** | **X4** | **X5** |
| Of which: Drug expenditure for the specialist health services  |  |  |  |  |  |
| Of which: Other related costs in the specialist health services  |  |  |  |  |  |
| Of which: Other related costs in the Health and Care Services (excluding the specialist health services) |  |  |  |  |  |
| **Minus:****The pharmaceutical under consideration is NOT introduced**  | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** |
| Of which: Drug expenditure for the specialist health services  |  |  |  |  |  |
| Of which: Other related costs in the specialist health services  |  |  |  |  |  |
| Of which: Other related costs in the Health and Care Services (excluding the specialist health services) |  |  |  |  |  |
| **Budget impact of the recommendation** | **X1 - Y1** | **X2 – Y2** | **X3 -Y3** | **X4 – Y4** | **X5 –Y5** |

## Discussion on the submitted documentation

[Describe the strengths and weaknesses of the documentation submitted (max 2 pages). The focus must be placed in particular on the uncertainty related to the clinical documentation used and other key input data, the health economic model structure, and the relevance for the Norwegian context. See Chapter 12.2 of the Guidelines.]

[Text]

## References

[Insert the reference list]

[All published articles cited in this document (and in the appendices) must be enclosed as a pdf file. If "data on file" is used as documentation in the technology assessment, the relevant part of the documentation must also be submitted in a separate e-mail labeled with "data on file".]

## Appendix A – Litterature search for the relative efficacy (intervention and comparator)

[Follow Chapter 4 of the Guidelines]

[Describe how the literature search was performed. Explain the selection of the search criteria and terms used, the inclusion and exclusion criteria.]
[Text]

Objective of the literature search: [What questions is the literature search expected to answer?] [Text]

Databases: [Describe briefly which databases, registers and any conference material used in the literature search] [Text or table]

Example of table: Bibliographic databases included in the literature search

|  |  |  |  |
| --- | --- | --- | --- |
| Database | Platform | Relevant period for the search  | Date of search completion |
| Embase | Embase.com | E.g. 1970 until today  | dd.mm.yyyy |
| Medline | Ovid |  | dd.mm. yyyy |
| PsychInfo |  |  | dd.mm. yyyy |
|  |  |  | dd.mm. yyyy |

Abbreviations:

Example of table: Registers included in the search

|  |  |  |
| --- | --- | --- |
| Database | Platform | Search strategy  |
| US NIH registry & results database | <https://clinicaltrials.gov> |  |
| WHO ICTRP registry | <http://apps.who.int/trialsearch/> |  |
| EU Clinical Trial Registry | <https://www.clinicaltrialsregister.eu/> |  |

Abbreviatons:

Example of table: Conference material included in the litterature search

|  |  |  |  |
| --- | --- | --- | --- |
| Conference | Source of abstracts | Search strategy | Words/terms searched |
| 58th xxxx | provide webside | Manual search |  |
|  |  | Search by individual words in the congress material  |  |

List: Supplementary manual searches

[Enter which other sources have been manually searched (e.g. web pages, EPAR, etc.).] [Text]

### Search strategy

[Describe the development of a search strategy and search string. Specify the inclusion and exclusion criteria for the search and justify (e.g. patient population, intervention, comparator, outcomes, study design, language, time limits, etc.).]

[Text]

[The search must be documented for each database.]

Example of table:

|  |  |  |
| --- | --- | --- |
| No. | Query | Results |
| #1  |  | 88244 |
| #2  |  | 85778 |
| #3  |  | 115048 |
| #4  |  | 7011 |
| #5  |  | 10053 |
| #6  |  | 12332 |
| #7  |  | 206348 |
| #8  |  | 211070 |
| #9  | #7 OR #8 | 272517 |
| #10  | #3 AND #6 AND #9 | 37 |

### Systematic selection of studies (e.g. PRISMA chart)

[For example, enter the PRISMA charts here (see, for example, [http://prisma-statement.org/PRISMAStatement/FlowDiagram.aspx)](http://prisma-statement.org/PRISMAStatement/FlowDiagram.aspx%29).]

[Figure]

Literature search results:

Example of table: Overview of study design for studies included in the technology assessment/analysis:

| Study/ID | Aim | Study-design | Patient population | Intervention and comparator(sample size (n)) | Primary outcome and follow-up period  | Secondary outcome and follow-up period |
| --- | --- | --- | --- | --- | --- | --- |
| Study 1 |  |  |  |  |  |  |
| Study 2 |  |  |  |  |  |  |

### Quality assessment

[Perform a quality assessment of the selected studies (e.g. JADAD score etc.) and summarise in table.]

|  |  |  |
| --- | --- | --- |
| Study | E.g. JADAD score | Comments |
|  |  |  |
|  |  |  |
|  |  |  |

## Appendix B – Documentation of relative efficacy through indirect comparisons

[Requirements and methods for the documentation of relative efficacy are described in the Chapter 6.1 and Appendix 1 of the Guidelines. The documentation below will be based on literature search presented in Appendix A. If it is more appropriate, the literature search can be presented in the attachment that belongs to the meta-analysis/network meta-analysis. In that case, all the elements mentioned in Appendix A must be addressed.]

### If a paired indirect comparison was performed

[Describe the methodology and the results] [Text]

[Add the complete documentation as a separate attachment.]

### If a meta-analysis/network meta-analysis was performed

[Add the complete documentation as a separate attachment.]

### If a matching-adjusted indirect comparisons (MAIC) were performed

[Add the complete documentation as a separate attachment. The following must be answered and clearly presented in the attachment:]

[Do the selected studies have a common comparator?]

[If yes, explain why MAIC is used instead of a standard methods for indirect treatment comparison (ITC). Why is this method more likely to provide estimates with less bias than standard methods?]

[Are the compared studies sufficiently overlapping with regards to study design, inclusion criteria, patient characteristics, definition of outcomes and reporting of data?]

[Define the effect modifiers before the analysis is performed.]

Full overview of (assumed) effect modifiers (and prognostic factors):

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | E, P, EP, ?\* | Reference | Description of empirical or biological plausibility  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

\* E: effect modifier, P: prognostic factor, EP: both effect modifier and prognostic factor,

?: Uncertain meaning

[Which of the effect modifiers are not balanced in the studies compared?]

[Is there sufficient information in the studies to correct for these factors?]

[What covariates are not possible to take into account in the analysis?]

[Evaluate the bias due to unmeasured confounding factors.]

[Describe the methodology and results, illustrate using relevant tables.]

Results of matching, example table when there is no common comparator:

|  |  |  |
| --- | --- | --- |
| Effect modifiers and possible prognostic factors to match | Before matching\* | After matching |
| Study arm from A (m/IPD)N=x | Study arm from B (m/AD)N=y | Studiearm A (m/IPD)Neff = ? |
| Age |  |  |  |
| Disease stage  |  |  |  |
| Lab results  |  |  |  |
| Etc. |  |  |  |

\* After using the inclusion and exclusion criteria from the comparator study on IPD from the index study.

[Evaluate the distribution of applied weights and provide the effective sample size (Neff).]

Outcome - Results for the MAIC, example table when there is no common comparator:

|  |  |  |  |
| --- | --- | --- | --- |
| Outcome  |  |  |  |
| Study arm from A  (m/ IPD) | Study arm from B (m/AD) | e.g. RR, HR, 95% CI ( p-value)A vs B | OR, 95% CI ( p-value)A vs B |
|  |  |  |  |  |
| 1 before matching |  |  |  |  |
| 1 after matching |  |  |  |  |
| 2 before matching |  |  |  |  |
| 2 after matching |  |  |  |  |
| Etc.  |  |  |  |  |

[If the compared studies have a common comparator, consider how similar the comparator arms are after matching. Presents the relative difference between the two studies’ placebo effect with 95% CI. Explain the possible influence of unmeasured confounding factors.]

[Describe thoroughly to what extent the adjusted population differs from the population to which this technology assessment applies.]

### If a simulated treatment comparison (STC) was used

[Add the complete documentation as a separate attachment. The following must be answered and presented clearly in the attachment:]

[Do the selected studies have a common comparator?]

[If yes, explain why STC is used instead of standard methods for ITC. Why is this method more likely to provide estimates with less bias than standard methods

[Are the compared studies sufficiently overlapping with regards to study design, inclusion criteria, patient characteristics, definition of outcomes and reporting of data?]

[Define the effect modifiers before the analysis is performed.]

Full overview of (assumed) effect modifiers(and prognostic) factors:

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | E, P, EP, ?\* | Source | Description of empirical or biological plausibility  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

\* E: effect modifier r, P: prognostic factor, EP: both effect modifier and prognostic factor

?: Uncertain meaning

[Which of the effect modifiers are not balanced in the studies compared?]

[Is there sufficient information in the studies to correct for these factors?]

[What covariates are not possible to take into account in the analysis?]

[Evaluate the bias due to unmeasured confounding factors.]

[Specify the type of regression model used for the different output variables modelled: (usually, linear regression is used if the variable is continuous, logistic regression if the variable is dichotomous, Poisson regression/negative binomial if count data is used, and parametric functions if time to event data is used).]

Example of table: Regression models chosen

|  |  |  |
| --- | --- | --- |
| Outcome variable | Regression model | Comments |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

[Describe the methodology and the results, illustrate by using relevant tables.]

## Appendix C Parameterisation

[Describe how parameterisation is performed in accordance with Appendix 2 of the Guidelines (Use of time-to-event data in Health Economics Analysis.)]

[Text and Figure]

## Appendix D – Litterature search for HRQoL data

[Follow Chapter 4 of the Guidelines.]

Describe how the literature search for the health-related quality of life data was performed. Explain the selection of search criteria and terms, inclusion and exclusion criteria.]
[Text]

literature search: [What questions is the literature search expected to answer?] [Text]

Databases: [Describe briefly which databases, registers and any conference material were used in the literature search] [Text or table]

Example of table: Bibliographic databases included in the literature search

|  |  |  |  |
| --- | --- | --- | --- |
| Database | Platform | Relevant period for the search  | Date of search completion |
| Embase | Embase.com | E.g. 19 until today | dd.mm.yyyy |
| Medline | Ovid |  | dd.mm. yyyy |
| Specific health economics databases[[1]](#footnote-1) |  |  | dd.mm. yyyy  |
|  |  |  | dd.mm. yyyy |

Abbreviations:

Table: [Registers included in the search]

Table: [Conference material included in the search]

List: [Additional Manual Search]

[Enter which other sources have been manually searched (e.g. web pages, EPAR, etc.).] [Text]

[Describe the development of a search strategy and search string. Enter the inclusion and exclusion criteria for the search and justify (e.g. patient population, intervention, comparator, outcomes, study design, language, time frame, etc.).]

[Text]

[The search must be documented for each database.] [Text or Table]

[Describe which criteria have been used to reject irrelevant studies and how the final selection has been made. Use PRISMA charts if appropriate (see, for example, <http://prisma-statement.org/PRISMAStatement/FlowDiagram.aspx>).]
[Figure]

Literature search results:

[Insert results in a table]

## Appendix E Mapping of HRQoL data

[Describe the method used for mapping according to Chapter 7 (and 7.3) of the guidelines. Present the results.]

[Text]

## Appendix F Severity calculation

[Severity must be calculated according to Guidelines Chapter 11 and Appendix 4.]

[Provide a detailed description of how severity was calculated.]

[Text]

[Table]

[Uncertainty in the severity calculation must also be presented.]

[Describe sources of uncertainty in the assumptions.]

[Text]

[Present the consequences of the uncertainty, for example in table and/or diagram where the calculation of severity (absolute shortfall) as a function of age and/or prognosis is presented.]

[Chart, table]

## Appendices G, H, I ... etc. Company-specific appendices

1. Papaioannou D, Brazier J, Paisley S. Systematic searching and selection of health state utility values from the literature. Value Health. 2013;16(4):686-95. [↑](#footnote-ref-1)