**Guidance on the Evidence Generation Phase of the Pathway for Ultra-Orphan Medicines**

**Purpose**

The purpose of the evidence generation phase of the pathway for ultra-orphan medicines is to collect information about relevant clinical outcomes and patient reported outcomes to address, as much as possible, the uncertainty associated with the ultra-orphan medicine in order to increase the Scottish Medicines Consortium’s (SMC) confidence in clinical and cost-effectiveness of treatment at the point of reassessment.

This document offers guidance about the process in relation to the data collection and evidence generation phase of the ultra-orphan pathway.

**Introduction**

The Scottish Government (SG) announced the introduction of a new pathway for ultra-orphan medicines in June 2018 with a phased implementation period; the validation process commenced in October 2018 and the rest of the pathway from April 2019. To enable an ultra-orphan medicine to be available through the pathway, there are four conditions that must be met. They are that a pharmaceutical company:

- has the medicine validated as an ultra-orphan according to the SMC definition;
- makes a full submission to the SMC for the initial assessment stage that meets SMC requirements for assessment under the ultra-orphan process;
- offers a Patient Access Scheme (PAS) that complies with the standard terms and conditions considered acceptable by the Patient Access Scheme Assessment Group (PASAG); and
- supports the data collection arrangements that meets the evidence generation requirements for assessment under the ultra-orphan pathway.

The new pathway comprises of four key stages:

1. **Validation** – the medicine must be validated as an ultra-orphan medicine by the SMC under a new definition which includes set criteria;
2. **Initial SMC Assessment** - a full submission (along with a PAS) must be made by the pharmaceutical company to the SMC to allow an initial assessment of the clinical and cost effectiveness of the medicine;
3. **Evidence Generation** - the pharmaceutical company must undertake to collect data in order to generate evidence over a period of up to three years to increase the SMC’s confidence in the clinical and cost-effectiveness of the ultra-orphan medicine at time of reassessment; and
4. **Reassessment** – a full update of the submission offered at stage 2 should be made to the SMC by the company following the three year data collection period. The SMC will make a decision as to whether the medicine is to be accepted for general use in NHS Scotland.
In recognition of the uncertainties in the supporting evidence for these medicines, companies must commit to generating evidence by collecting additional data on the effectiveness of the medicine in the specific indication during the three year period of the medicine being available through the pathway. The focus of this activity should be the collection of relevant clinical and patient reported outcomes that would be expected to increase the SMC committee’s confidence at the point of re-assessment.

In particular, pharmaceutical companies will:

- undertake to collect data on the ultra-orphan medicine for the duration of its availability through the pathway;
- ensure that the focus of the data collection activity attempts to address the uncertainties within the existing evidence-base, including those highlighted in the initial SMC assessment report;
- draw on any existing data collection activities from other parts of the UK and beyond as part of the overall package of evidence generation;
- seek to collect Patient Reported Outcome Measures (PROMs), where appropriate, and other data on the impact beyond direct health benefits and on specialist health services; and
- cover all the costs associated with the data collection, including infrastructure costs such as registry and/or database costs, resourcing costs such as data analyst or input support and PROMs costs.

**Pre-evidence generation phase**

**Commitment to evidence generation**

The commitment from pharmaceutical companies to generate evidence by collecting additional data on the effectiveness of the medicine in the specific indication will be highlighted during early engagement meetings. Evidence of that commitment will take the form of a data collection plan which must be submitted to SG prior to health boards being notified that the medicine is available through the pathway.

**SMC Initial Assessment**

Following a positive validation, companies will be required to make a submission to the SMC for an initial assessment of the clinical and cost-effectiveness of the medicine. The SMC will use a broad framework to appraise the medicine which takes account of the nature of the condition, impact of the medicine, value for money, impact beyond direct benefits and on specialist services, and costs to the NHS. Further information is available in the SMC guidance to submitting companies – supplement for medicines for extremely rare conditions (ultra-orphan medicines). (https://www.scottishmedicines.org.uk/media/4155/guidance-supplement-ultra-orphan.pdf)

The SMC initial assessment report will highlight uncertainties within the available evidence-base which will help to inform the evidence generation and data collection period of the pathway. The report will be published in normal SMC timelines, within one month of the SMC meeting.
Health Board notification that the ultra-orphan medicine is available

Once the SMC initial assessment report has been issued and the PAS and data collection conditions of the pathway have been met, Health Boards will be notified by the SG that the ultra-orphan medicine is available for prescribing through the pathway.

**Evidence generation phase**

The purpose of the evidence generation phase is to collect data to address the uncertainties within the existing evidence-base, including those highlighted in the initial SMC assessment report.

Companies can start to plan the data collection work as soon as possible, ideally following a positive validation. Whilst it is recognised that the evidence generation and data collection plan is unlikely to be fully developed until after the SMC’s initial assessment report is issued, there will be aspects that can be established in advance of the plan being finalised. This will be for companies to determine.

**Data Collection Plan**

Pharmaceutical companies will need to develop a data collection plan. This will be required as part of the evidence that the data collection condition for entry to the pathway has been met. The plan should seek to describe ongoing clinical and quality of life studies and real world data that can help to address the uncertainties within the existing evidence-base, including those highlighted in the initial SMC assessment report.

It is recognised that some companies may welcome external support in the development of their data collection plan, to ensure that the critical weaknesses in data have been accurately reflected and that the plans in place can be expected to address the identified data uncertainties. Work is underway to develop a service from NHS Research Scotland (NRS) which companies will be able to choose to use. Further information on this service and any associated costs will be available as an addendum to this guidance document.

**Clinical Data**

The data collection plan should draw on any existing clinical studies or new data collection activities e.g. registries which can be from other parts of the UK and beyond as part of the overall package of evidence generation. There is an expectation that any data from patients being treated in Scotland will be incorporated into appropriate data systems at either a UK or European level.

**Patient Reported Outcomes and Other Data**

The data collection plan provides the opportunity to collect PROMs and other types of data in the ‘real world’. Companies should consider how to capture the patient experience and the impact the medicine has beyond the direct health benefits i.e. other than clinical benefits and adverse effects, and also its impact on specialist health services, as described in the SMC’s ultra-orphan framework.
For example, this may include data in relation to:

- opportunities for patients to contribute to society, improve family functioning, continue in employment or education;
- impact on carers’ quality of life (e.g. using tools such as the Carer Experience Scale) and ability to work;
- impact of adopting a wider perspective on the cost-effectiveness of the medicine (e.g. incorporating loss of earnings, carer disutility); and
- implications of the introduction of the new medicine on the NHS including staffing, infrastructure and training requirements.

Companies may wish to engage with patients/carer groups, clinicians and other appropriate members of the health and social care team to determine the key questions to be addressed by patients receiving the ultra-orphan medicine. This may take the form of a data collection workshop, focus group or any other appropriate arrangement.

Companies may wish to engage an academic partner when considering the development and collection of any PROMs data.

**Data Governance**

Companies will need to ensure that any data collection activities comply with local Health Board governance arrangements.

**Data Collection Report**

Companies will be expected to submit a short report outlining their evidence generation and data collection plan to the SG (medicines.policy@gov.scot). Companies should consider inclusion of the following information in their report:

- any areas of uncertainty within the available evidence-base specific to the medicine, including those identified during the SMC assessment;
- details of any clinical data sources being used to inform the data collection process;
- details of PROMs and any other real world data that the company intend to collect;
- an explanation of how the data will attempt to address the uncertainties around the medicine for that specific indication;
- information on patient eligibility, such as an estimation of patient numbers during data collection period;
- how the data will be collected and analysed along with anticipated timescales; and
- the details of the academic partner that the company is working with.

In addition, the report should include a prospective timeline for data collection and a probable date for the updated submission for SMC reassessment. The data collection period will normally be three years, but companies may resubmit earlier if sufficient data is available.
Pharmaceutical companies will be expected to submit their initial report to SG within three months of the publication of the SMC initial assessment report. It is envisaged that this should give companies adequate time to finalise their data collection plan in line with the findings in the SMC initial assessment report.

There may be exceptional circumstances where a company requires more time, for example where a medicine requires some service reconfiguration in order for appropriate resources to be in place for the medicine’s administration. In these circumstances an effective start date for the three year data collection period can be negotiated with SG.

**Start of the three year data collection period**

The data collection period can start once Health Boards have been notified that the ultra-orphan medicine is available for prescribing through the ultra-orphan pathway. Companies will also be notified of the effective start date.

**Three year data collection period**

Companies will be responsible for determining whether the data being produced is adequately measuring and achieving the outcomes identified in their data generation and collection plan, and whether any additional action is required. However, they may use the services of NRS to support them in this. The service and any associated costs will be detailed in an addendum to this guidance.

**Costs**

Pharmaceutical companies will be required to cover all the costs associated with the evidence generation and data collection period of the pathway.

**Post evidence generation Phase**

Pharmaceutical companies will be asked to provide a full update of the submission offered initially to the SMC following the period of evidence generation and data collection. The SMC will then review information provided by the company as well as other sources of evidence e.g. from clinical experts, Patient Groups and, where relevant, the output from a Patient and Clinician Engagement (PACE) meeting, and will make a decision on the routine use of the medicine in the NHS in Scotland.