Content of this Plain Language Summary

The objective of the Plain Language Summary is to help the general public understand EUnetHTA assessments. You can find the link to the full assessment report later in the summary.

What is included in this Plain Language Summary? First, this document explains what EUnetHTA is and what this network does. Second, you will find the summary of the assessment.

What is EUnetHTA?

EUnetHTA is the European Network for Health Technology Assessment (HTA). EUnetHTA was established to create an effective and sustainable network for HTA across Europe. Our partners work together to help develop information to contribute to HTA in European countries. For more information on our goals and how we work, please visit our website and our patient flyer.

EUnetHTA consists of over 80 partners that are all non-profit organisations. All partner organisations either produce or support the production of HTA reports. For more information on HTA, visit EUnetHTA's Frequently Asked Questions.

EUnetHTA does not give any advice on reimbursement of a specific health technology. The reimbursement decision is a national or regional decision. This means that reimbursement of health technologies can also differ between countries in Europe.

What does EUnetHTA do?

EUnetHTA supports national and regional research institutions and health ministries in their decision-making. For this task, EUnetHTA uses specific methods to assess health technologies. Health technologies that may be assessed by EUnetHTA include medicines and other health technologies such as specialist medical care, surgical interventions and diagnostic tests. The purpose of this plain language summary is to help the general public understand the findings from this assessment.

Summary of the assessment

This section provides a summary of the assessment and was published on 30/07/2020. To get a better understanding of commonly used HTA concepts, we advise you to look at the HTAi glossary.

Why did we conduct this assessment?

The purpose of this EUnetHTA assessment is to give national healthcare systems robust information about the therapy under assessment.

What is the context of this assessment?

Acute myeloid leukaemia is a cancer of the white blood cells that progresses quickly and aggressively. Symptoms include appetite loss, weight loss, fatigue, breathlessness, confusion, bruising, bleeding and frequent infections. The risk of acute myeloid leukaemia increases with age and it is most common in people over 75.

Intensive chemotherapy is the main treatment for acute myeloid leukaemia, which aims to kill as many cancer cells in the body as possible and to reduce the risk of the disease coming back. Some people also receive a stem cell transplant. However, older people and those in poorer physical health are often unable to tolerate the unwanted effects of these treatments. For these people, less intensive cancer drugs can be used, which have fewer side effects, but are considered to be less effective. These treatments usually aim at improving quality of life and alleviating symptoms rather than to cure the disease. Some people may also choose treatments that manage the symptoms of the disease only.

In Europe, glasdegib was granted a licence in June 2020, for the treatment of newly diagnosed acute myeloid leukaemia in patients who are unable to tolerate intensive chemotherapy. It is a medicine taken by mouth and the dosage is 100 mg once daily. It is used in combination with another cancer drug, cytarabine, which is given in a low dose. Glasdegib works by reducing the ability of cancer cells to grow and survive. Adding glasdegib to low-dose cytarabine may prolong survival compared to low dose cytarabine alone.

What did EUnetHTA review?

Through this assessment, EUnetHTA reviewed how well the drug combination of glasdegib added to low-dose cytarabine works and how safe it is in patients who are unable to tolerate intensive chemotherapy. This is compared to what is currently used to treat acute myeloid leukaemia in patients unable to tolerate intensive chemotherapy.

What is the drug under review?	Glasdegib, when added to low-dose cytarabine
What is the study group?	Adult patients with newly diagnosed acute myeloid leukaemia, who are unable to tolerate intensive chemotherapy
What is the drug compared to?	Cancer drugs normally used to treat people with this disease • Azacitidine • Decitabine • Low-dose cytarabine Best supportive care, i.e. treatment of symptoms of the disease only
What are the outcomes this review investigates?	Outcomes on effectiveness of the drug • Survival • Quality of life • Need for blood transfusions • Reduction or disappearance of the signs and symptoms of this disease Outcomes on safety and side effects of the drug Adverse events, i.e., any negative medical occurrences that happen during treatment. In particular, adverse events that are

- Fatal, life-threatening or result in disability
- Result in hospitalisation or require medical treatment
- Lead to a patient stopping treatment
- One of the following: fever, pneumonia (lung infection), haemorrhage (bleeding), QT interval prolongation (an electrical irregularity in the heart).

What are the main findings?

As of January 2020, one study evaluating the effectiveness of glasdegib added to low-dose cytarabine, compared to low-dose cytarabine alone, was found. A total of 116 people with acute myeloid leukaemia were included in this study, which took place in various countries. All people included in this study were unable to tolerate intensive chemotherapy due to factors such as older age, heart and/or kidney problems, and general physical health. The people in this study had an average age of 76 years, and approximately 71 % of them were male and 29 % female.

The study showed that people treated with glasdegib added to low-dose cytarabine survived an average of 8.3 months, while those treated with low-dose cytarabine alone survived an average of 4.3 months. The certainty of the evidence is considered to be low, which means that it is likely that the actual treatment benefit of glasdegib could be different from that seen in the study. Some people appear to benefit more from glasdegib treatment than others due to inherited (genetic) factors, though this observed difference could be due to chance alone.

In addition to this, the study suggested that adding glasdegib might lead to improvements in the following outcomes, however, no firm conclusions can be drawn:

- the number of patients achieving a (temporary) reduction or disappearance of the signs and symptoms of the disease
- the need for blood transfusions
- the length of time spent in good health.

Side-effects appeared to be similar for people treated with and without glasdegib, though the evidence is uncertain: as the study was small, it was not possible to reliably compare less common side-effects. In addition, patients in the study knew whether or not they were receiving glasdegib, which may have affected whether or not they reported side-effects.

Two studies evaluating other drugs for this disease, azacitadine and decitabine, were also included in the assessment. It was not possible to draw any firm conclusions about the effectiveness or safety of glasdegib compared to either azacitadine or decitabine from these studies. Also, no evidence on the comparison between glasdegib and supportive care (i.e. treatment of symptoms only) was provided.

Did EUnetHTA involve stakeholders?

EUnetHTA values involvement of stakeholders in the assessments. This enables the assessments to consider/include patients' experiences and improves applicability of the assessments. Patient associations were invited to provide input at the initial stages of this assessment. Their input was gathered via an open call for patient input.

Additional information

This report was written by HTA organisations from Austria (DVSV) and Ireland (NCPE). Organizations from France (HAS), Switzerland (SNHTA) and Portugal (INFARMED) have contributed in reviewing roles. The full scientific content is reported in EUnetHTA assessment PTJA12, and can be found here. EUnetHTA has received funding from the European Union's Health Programme (2014-2020). The content of this summary reflects the views of the authoring team. This cannot be considered to reflect the views of the entire EUnetHTA or any body of the European Union. Individuals involved in this assessment were cleared for any potential conflict of interests.

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