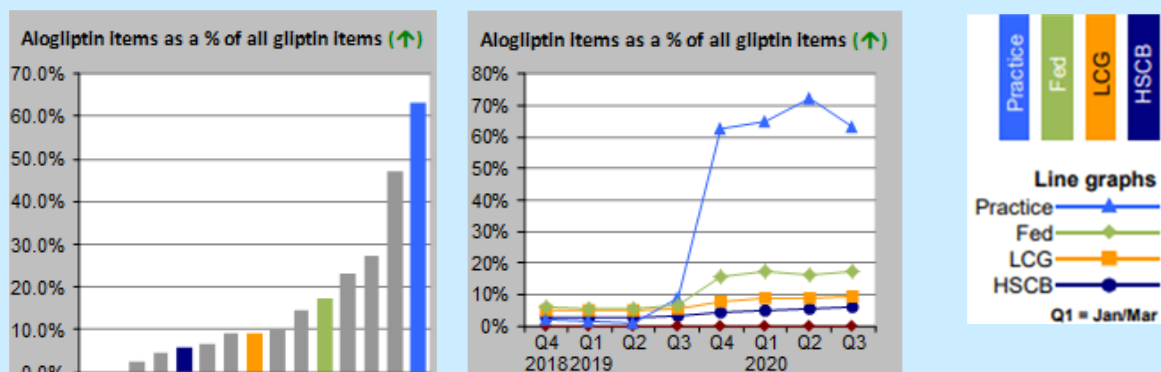


## Review / 'Switch' Tool

Metformin is the first choice medicine to manage blood glucose in type 2 diabetes unless it is contraindicated or not tolerated. It has a proven survival record. Doses of metformin should be titrated slowly to avoid intolerance due to GI side effects<sup>2</sup>. When a DPP-4 inhibitor (or 'gliptin') is appropriate, alogliptin is listed on the [Northern Ireland Formulary](#) as joint first choice agent for dual and triple therapy, as per its license indication.<sup>2</sup>

HSCB has developed a [Review tool](#) for patients taking 'gliptins'. The Review tool is based on similar 'gliptin' review tools which have been used in other parts of the UK, and has been approved by local endocrinologists (May 2019). Some GP practices have implemented this tool, as shown in the example COMPASS graph of a practice below. As you can see, the % alogliptin as a % of all 'gliptins' is over 70% in this practice. This Newsletter Supplement aims to increase awareness of the Review tool and to provide an example of a practice that undertook a review using the tool.



**If all GP practices in NI were to switch to 70% alogliptin, £1 million efficiency could be released in one year.**

## Background

### Place in therapy of DPP-4 inhibitors

- DPP-4 inhibitors are not considered the most cost-effective choice when used as first-line therapy, and even when used as 2<sup>nd</sup> or 3<sup>rd</sup> line, they may only result in a modest reduction of HbA1c (~ 5.5mmol/mol (0.5%)). For a quick comparison summary, see the [Northern Ireland Formulary oral drugs to manage blood glucose table](#). In some situations, alternatives, i.e. a sulfonylurea, SGLT2 inhibitor, insulin, pioglitazone or a GLP-1 analogue may be more appropriate.
- Alogliptin is currently licensed for dual and triple therapy in adults aged over 18 years with type 2 diabetes mellitus to improve glycaemic control. The licence does not preclude any combination of other glucose lowering medicinal products including insulin, when these, together with diet and exercise, do not provide adequate glycaemic control.

### Cost of DPP-4 inhibitors

- The cost of general practice prescriptions for DPP-4 Inhibitors across Northern Ireland is currently nearly £8 million per annum. This is approximately one fifth of the total spend on drugs and consumables for diabetes.
- [NICE NG28<sup>3</sup>](#) states that “If 2 drugs in the same class are appropriate<sup>4</sup>, choose the option with the lowest acquisition cost”.
- Alogliptin is the most cost-effective DPP-4 inhibitor. It is priced approximately 20% lower than the other four DPP-4 inhibitors.
- Each of the DPP-4 inhibitors are available in a combination product with a fixed dose of metformin. The cost of the combination product for all NI Formulary choices is the same as the cost of the DPP-4 inhibitors by itself. The combination preparation is therefore a cost-effective treatment option and will also reduce the patient tablet burden.
- The first patent to expire on DPP-4 inhibitors will be in 2022.

## Alogliptin review tool — what a local practice did

A General Practice Pharmacist (GPP) carried out a review of DPP-4 inhibitor prescribing using the Alogliptin [Review tool](#) in a local GP practice. The GPP has a special interest in diabetes and runs a diabetes review clinic.

Patients were sent the standard letter included in the standard operating procedure (SOP), unless a diabetes review clinic appointment was due, in which case the review was carried out face to face. Patients who were unsuitable for a switch to alogliptin were easily excluded by following the directions in the SOP. Several patients were taken off their DPP-4 inhibitor, rather than switched to alogliptin, as the review revealed that a more appropriate drug regimen was required for those individuals. Therefore the review had benefits for patients in addition to saving money by a ‘switch’ to a less costly drug. The GPP reported no problems in using the Review tool and found it simple and easy to follow.

GPPs without a diabetes specialism should be able to carry out this review also. The GPP, Bernard Griffin, has kindly offered to speak to anyone who has queries about his experience with this initiative. His e-mail address is [B.Griffin.200260@gp.hscni.net](mailto:B.Griffin.200260@gp.hscni.net). Queries can also be directed to HSCB pharmacy advisor [Karen.dolan@hscni.net](mailto:Karen.dolan@hscni.net).

## References

<sup>1</sup>Vipidia tablets. Summary of Product Characteristics , EU Takeda Pharma/January 2015

<sup>2</sup>Northern Ireland Formulary <https://niformulary.hscni.net>

<sup>3</sup> NICE. National Institute for Health and Care Excellence. Evidence Summaries: New medicines, ESNM20:Type 2 diabetes: alogliptin. May 2013. Available at <https://www.nice.org.uk/advice/esnm20/chapter/Overview>

<sup>4</sup> Craddy P et al. Comparative Effectiveness of Dipeptidylpeptidase-4 Inhibitors in Type 2 Diabetes: A Systematic Review and Mixed Treatment.