Glaucoma Update

Issue 2

Switch to PF-latanoprost: Improves the tolerability and satisfaction in glaucoma patients

Glaucoma is the third leading cause of irreversible blindness globally and the relatively asymptomatic nature of the damage makes it an even more significant public health concern compared to cataracts.[1,2] Glaucoma occurred in 64.3 million people in 2013 and is expected to increase to 76 million in 2020 and 111.8 million people in 2040.[3]

Controlling elevated intraocular pressure (IOP) demands effective and tolerable hypotensive treatment options, making the selection of therapy difficult.[4] Also, patient compliance is hampered by the ocular surface disease which develops due to the use of preservatives in drugs.[5] High prevalence of ocular surface disorders due to ocular intolerance has been observed in glaucoma, leading to reduced quality of life and poor adherence to treatment, thus compromising the clinical outcome.[4]

Latanoprost has now been considered as the standard of care for glaucoma treatment. However, older latanoprost eye drops contained preservatives that were associated with toxic effects at the ocular surface. With the recent availability of preservative-free (PF) latanoprost formulations, reduced ocular symptoms and improved compliance has been made possible.[5]

PF-latanoprost provides better tolerability and improved patient compliance

A multicenter, international, observational survey explored patients satisfaction who had started the PF-latanoprost treatment or switched from another topical glaucoma treatment to PF-latanoprost.[5]

Study participants[5]

The study inlcuded patients diagnosed with glaucoma, ocular hypertension, visual field defect, or disc abnormalities

Methods[5]

Patients recieved PF-latanoprost for at least 3 months

Outcomes measured[5]

- Level of patient's satisfaction towards PF-latanoprost was measured.
- The tolerability to latanoprost treatment and to the previous treatment was determined on a 100 mm visual analog scale

Reason behind switching to PF-latanoprost treatment[5]

- Among the 1135 patients with glaucoma, local intolerance or lack of efficacy was the most common reason for switching treatment to PF-latanoprost.
- The frequency of switching the treatment was 2.4 ± 1.78 times.

Tolerability of PF-latanoprost[5]

- Overall 95.3% of patients reported increased satisfaction to their current preservative-free treatment (Table 1) and 73.4% gave it a better rating compared to previous treatment in terms of tolerance.
- Based on the VAS score, patients rated tolerability with PF-latanoprost treatment to be 82.4 ± 17.1 compared to 56.1 ± 27.3 with previous preserved treatment demonstrating an overall improvement of 47%.

Patients satisfaction[5]

Patients treated previously with preserved topical therapy and those previously treated with preservative-free topical therapy both showed a similar level of satisfaction to preservative-free treatment (94.8% and 94.1%, respectively).

Reduction in IOP [5]

Patients treated previously with preserved topical therapy and those previously treated with preservative-free topical therapy had similar IOP.

Ocular surface disease[5]

- Only 9.3% of patients receiving PF-latanoprost, developed ocular surface disease with 74.6% mild cases, 23.9% moderated cases and 1.4% severe cases (Table 1).
- Patients switching from a preserved treatment demonstrated significantly higher severity of ocular surface disease compared to patients on preservative-free treatment ($p = 0.0054$).

Ocular signs and symptoms, and use of tear substitute[5]

- Majority of patients were found to be free of ocular signs and symptoms.
- A greater number of patients were with mild severity of symptoms
- Mild hyperemia was the most commonly observed sign (Table 1).

PF-latanoprost reported to be better or much better tolerated in patients previously treated with preserved medication than patients previously treated with preservative-free medication

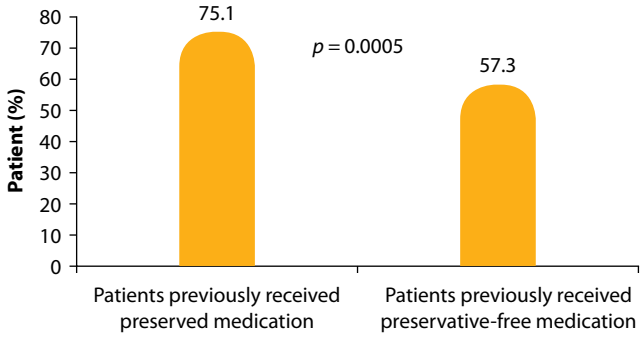


Table 1: Overall tolerability, compliance, tear substitute use and development of ocular symptoms

Parameters measured	Patients (%)
Patients satisfied with high tolerability to PF-latanoprost	95.3
Patients satisfied with PF-latanoprost treatment	94.7
Reduction in patients using tear substitutes	28.1
Patients who developed ocular symptoms of only mild severity	>85
Patients with mild hyperemia	42.6

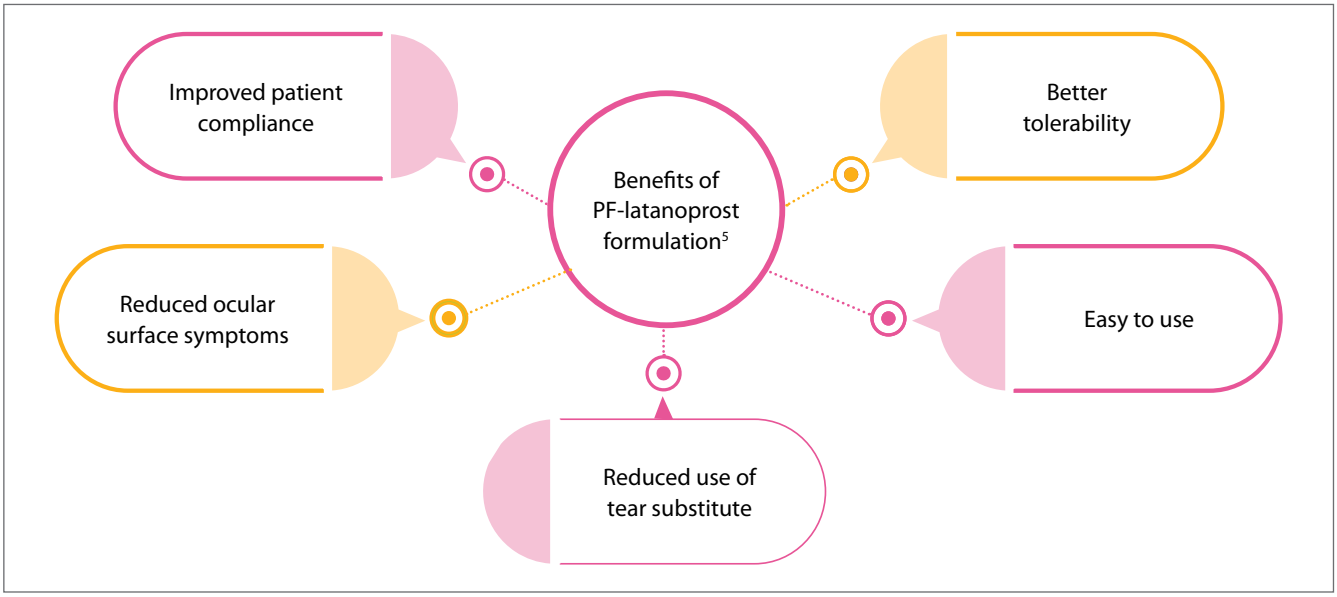
- Reduction in use of tear substitute was observed in patients who were using PF-latanoprost, who previously used a preserved treatment (Table 1).

Patient's satisfaction in different conditions[5]

- Newly treated patients showed more satisfaction compared to previously treated patients (p <0.001).
- Patients with no ocular surface disease were more satisfied with the treatment (p <0.0001).
- Patients who showed better or much better tolerence to PF-latanoprost treatment than their previous treatment were more likely to be satisfied than those for whom tolerability was the same as their previous treatment (p <0.0001).
- Patients who could decrease the use of tear substitutes were much more likely to be satisfied with treatment than patients who needed to increase the use of tear substitutes (p <0.001).

PF latanoprost associated with better tolerability and satisfaction

- In a comparative study to benzalkonium chloride-preserved (BAK) latanoprost, PF-latanoprost was equally effective in reducing IOP. and subjective rating of developing ocular symptoms and development of hyperemia was significantly lower in patients receiving PF-latanoprost.[6]
- Also when compared to other formulations of prostaglandins analogs, PF-latanoprost demonstrated similar efficacy reducing the patient's IOP and was associated with a significantly lower risk of developing hyperemia/ocular redness than these comparators.[6]
- This study demonstrated improved tolerability with PF-latanoprost both in glaucoma and ocular hypertensive patients who previously had preserved medication and in patients switching to PF-latanoprost with a greater reduction in the use of tear substitutes.[5]
- Increased number of patients were satisfied with their treatment, regardless of whether they had received prior treatment with preserved or preservative-free topical medications or if they were naïve to glaucoma treatment.[5]



Clinical implication

PF-latanoprost resulted in an effective reduction of IOP with good tolerability and improved patient satisfaction. This could increase the persistence with anti-glaucoma treatment, thus better preserving the vision for long term.

References

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PF - Preservative free

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