Joint Position Statement on Biosimilar Drugs

October 2022

Biosimilar biologic drugs (biosimilars*) were introduced in the Canadian market in 2009. The first ophthalmic biosimilar for intravitreal injection is expected to be launched in Canada in the late fall of 2022. With this launch, it is expected that use of biosimilars across Canada will rapidly increase.

The Canadian Ophthalmological Society (COS), the Canadian Retina Society, and the Canadian Uveitis Society have reviewed the existing experience with ophthalmic biosimilars worldwide and feel that caution is needed in their introduction across Canada. Our review has highlighted important evidence gaps that raise concerns regarding effectiveness and safety of widespread adoption of ophthalmic biosimilars.

1. Generalizability of results from biosimilar trials is limited in the Canadian context: Biosimilar agents have been largely tested in the context of exploratory trials where fixed dosing regimen was used to maximize the signal. However, 10 years of real world evidence has demonstrated that fixed dosing is not a feasible option in clinical practice due to untenable treatment burden. Moreover, comparative effectiveness studies such as Protocol T[1] have demonstrated that when using pragmatic treatment algorithms such as PRN treatment, there is indeed superiority of specific agents over other agents with respect to clinically meaningful visual and quality of life outcomes[2]. Survey studies from CRS have demonstrated that the majority of Canadian physicians employ pragmatic treat and extend paradigm to achieve optimal visual outcomes while reducing treatment burden[3]. Currently there is no robust evidence to demonstrate comparative efficacy of biosimilar agents when treat and extend paradigms are employed.
2. Long term outcome data is lacking: Extension studies across various retinal diseases have demonstrated that initial visual gains are not reflective of long term outcomes. Protocol T extension study in DME demonstrated that patients gained on average approximately 2.5 lines of vision from baseline to year 2, however they lost one line of vision from year 3 to 5. Similarly, the CATT trial in AMD demonstrated that only 50% of patients achieved and maintained VA of 20/40 or better at year 5[4]. The initial response in treatment is an important variable, however, long term outcomes are vital to optimize patient outcomes in the real world. The efficacy of biosimilar agents in sustaining long term vision gains when treatment frequency is often reduced remains as important area of evidence gap.

3. Lack of robust safety outcome data: The existing experience with ophthalmic biosimilars is small, and smaller still relative to the number of injections of existing originator drugs into the eye across Canada every day. Although no significant safety signals have arisen in the use of ophthalmic biosimilars thus far, recent post marketing experience with another biologic drug for ophthalmic use demonstrated clearly that pre-marketing trials do not reliably detect all safety concerns[5]. Therefore, careful monitoring for the development of adverse effects as these drugs begin to be used will be important and a wholesale switch to the exclusive use of these drugs is ill advised until more data is available.

The physician-patient relationship and the trust that individual patients have in their physician is very important in the treatment of a chronic disease, particularly one in which progressive worsening in the patient condition is expected, and evidence-based and informed decisions are made in selecting one drug among multiple available options. Forcing patients to change medication based on predetermined broad sweeping criteria such as cost savings has the potential to undermine this relationship and make it more likely that deterioration is attributed to the new medication. Patients will need to be reassured that they can switch back if the treatment targets are not being met and the eye disease shows lack of improvement or worsening. Similarly, if physicians are to do their best for patients it's important that their hands are not tied, and they can return to the medication previously in use if the patient's condition worsens.

While supporting the potential of biosimilars to expand the choices available for effective treatment of eye disease in a cost-effective manner, it's important to recognize the impact that the manufacturers of the originator drugs and biologics had in developing programs to assist patients in obtaining coverage for the drugs, in funding Canadian research to better use these drugs in clinical practice, and in providing patient and physician education. Allowing these companies the opportunity to provide these drugs to the Canadian market at a cost competitive to the biosimilars is an important principle that will preserve the opportunity of Canadian patients and their physicians to have access to new innovator biologic drugs as they are developed.

Recommendations

1. Government mandated to a forced switching to a biosimilar should be avoided.
2. Similarly, treatment algorithms that mandate a specific sequence of medication use should be avoided.
3. If a patient is switched and does not experience a favorable anatomic and/or functional response, they should be given the opportunity to switch back to the biologic that was working.
4. In other jurisdictions, originator biologics have been allowed to price match biosimilars and we recommend that they are given this opportunity in Canada.

References

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