Office of Clinical Pharmacology Review

NDA or BLA Number	BLA 761216, S-003
Submission Date	March 3, 2022
Submission Type	Efficacy supplement; Standard review
Brand Name	YUSIMRY
Generic Name	adalimumab-aqvh
Applicant	Coherus BioSciences
Dosage Form and Strength	Injection solution: 40 mg/0.8 mL in a single-dose prefilled glass syringe and pen
Route of Administration	Subcutaneous injection
Proposed Indication	Treatment of moderate to severe hidradenitis suppurativa in adult patients
Proposed Regimen	• Day 1: 160 mg (given in one day or split over two consecutive days) • Day 15: 80 mg • Day 29 and subsequent doses: 40 mg every week or 80 mg every other week
OCP Primary Reviewer	Sneha Dhapare, Ph.D.
OCP Team Leader	Chinmay Shukla, Ph.D.
OCP Division	Division of Inflammation and Immune Pharmacology (DIIP)
OND Division	Division of Dermatology and Dentistry

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1. EXECUTIVE SUMMARY

The Applicant submitted a supplemental biologics license application (sBLA) for YUSIMRY (adalimumab-aqvh, formerly also known as CHS-1420) proposing to expand the indication for the treatment of moderate to severe hidradenitis suppurativa (HS) in adult patients.

Adalimumab-aqvh is an approved interchangeable biosimilar to US-licensed Humira (US-Humira) under section 351(k) of the Public Health Service Act (PHS Act) currently indicated for the treatment of:

- Rheumatoid Arthritis (RA) in adult patients
- Juvenile Idiopathic Arthritis (JIA) in patients 2 years of age and older
- Psoriatic Arthritis (PsA) in adult patients
- Ankylosing Spondylitis (AS) in adult patients
- Crohn's Disease (CD) in adults and pediatric patients 6 years of age and older
- Ulcerative Colitis (UC) in adult patients
- Plaque Psoriasis (PsO) in adult patients

In the US, HUMIRA was originally approved for the treatment of RA in 2002, followed by approval for the following additional indications between 2005 and 2012: PsA, AS, CD, PsO, JIA, and UC. US approval was granted for treatment of hidradenitis suppurativa (HS) in September 2015, and for treatment of uveitis in June 2016. The original BLA 761216 application included the following (see details in BLA 761216 Biosimilar Multidisciplinary Evaluation and Review, dated 12/17/2021):[1]

- Extensive comparative analytical assessment of adalimumab-aqvh, US-Humira.
- A PK similarity study (Study CHS-1420-03) in healthy subjects providing a comparison of adalimumab-aqvh and US-Humira to support PK similarity of adalimumab-aqvh and US-Humira and provide a PK bridge.
- A comparative clinical study (CHS-1420-02) comparing the safety and efficacy of CHS-1420 and U.S.-Humira at 12 weeks in subjects with moderate to severe chronic PsO to support a demonstration of no clinically meaningful differences in terms of safety, purity, and potency.
- Adequate scientific justification from the Applicant to support extrapolation of the demonstration of biosimilarity based on PK similarity data and clinical similarity data from the studied populations, to support approval of adalimumab-aqvh (YUSIMRY) for each of the additional indications which US-Humira had been previously licensed (including HS).

Of note, in the original application, the Applicant did not seek licensure for the treatment of moderate to severe HS, since the US-Humira's indication for HS was still protected by orphan drug exclusivity expiring on September 9, 2022. Subsequently, YUSIMRY was licensed on

[1] DARRTS, BLA 761216, REV-SUMMARY-14 (BMER); REV-SUMMARY-09 (CDTL Review); REV-SUMMARY-10 (Division Director Review), Original-1 (Type 2- New Active Ingredient), dated 12/17/2021

12/17/2021as interchangeable with US-Humira for the indications for which US-Humira has been previously approved and the indications that were not protected by any exclusivity.

In this supplemental application, no new clinical or clinical pharmacology data are submitted.

The sponsor has provided updated 'Justification for Extrapolation of Indications' for the new indication. No additional efficacy data was submitted in this supplement. The extrapolation of the indications is based on the following:

- Similar mechanism of action in each condition of use
- Similarity in PK and immunogenicity profile between Humira and CHS-1420 in different patient populations
- The differences in expected toxicities for CHS-1420 are similar to Humira (US) in each condition of use and patient population

Overall, the totality of evidence as discussed above is adequate to justify extrapolating the data and information submitted to the original biosimilar BLA to support licensure of adalimumab-aqvh for the indication of "treatment of moderate to severe hidradenitis suppurativa in adult patients", for which US-Humira has been previously licensed. The proposed dosage of adalimumab-adbm is the same as that US-Humira has been previously approved for HS. There are no clinical pharmacology issues that would preclude approval of the indication being sought for licensure.

The Sponsor intends to include the assessment for this indication for age group 12 to 17 years in future based on extrapolation of pediatric information from the reference product HUMIRA. The orphan exclusivity for this indication and age group expires in Oct 2025. The sponsor has submitted an amended Initial Pediatric Study Plan (iPSP).

1.1 Recommendations

The Office of Clinical Pharmacology has reviewed this supplemental BLA submission and found it acceptable from a clinical pharmacology standpoint.

1.2 Post-Marketing Requirements and Commitments

None.

This is a representation of an electronic record that was signed electronically. Following this are manifestations of any and all electronic signatures for this electronic record.

/s/

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