Report CIBINQO® abrocitinib

Product & Mechanism of action

Substance: abrocitinib

Brand Name: Cibinqo

Originator/licensee: Pfizer Europe MA EEIG

Classification: NCE

ATC code: D11AH

Orphan Status:
Eu: No
Us: -

Mechanism of action:
Abrocitinib is an oral JAK1 selective inhibitor that inhibits several key-cytokine signaling pathways known to have an important role in the pathophysiologic characteristics of AD, including IL-4, IL-13, IL-31, and interferon γ [1].

Authorized indications Licensing status

Authorized Indication:
EMA: abrocitinib is indicated for the treatment of moderate-to-severe AD in adults who are candidates for systemic therapy [2].

Route of administration: OS

Licensing status
EU CHMP P.O. date: 14/10/2021
FDA M.A. date: -

EU Speed Approval Pathway: No
FDA Speed Approval Pathway: -

ABBREVIATIONS:
AD: Atopic Dermatitis
BL: Baseline
CHMP: Committee for Medicinal Products for Human Use
EASI: Eczema Area and Severity Index
EASI-75: 75% improvement in EASI score from BL
ICER: Institute for Clinical and Economic Review
IGA: Investigator's Global Assessment
IL: Interleukin
JAK1: Janus Kinase 1
M.A.: Marketing Authorization
P.O.: Positive Opinion
pts: patients
QALY: quality-adjusted life-year
vs.: versus

Essential therapeutic features

Summary of clinical EFFICACY:

Trial	Treatment Arms	Primary Endpoint	Results
JADE Mono-1 (NCT03349060) is a multicentre, double-blind, randomised phase 3 trial in pts aged ≥12 years, with moderate to severe AD	●abrocitinib 100 mg (n=156), ●abrocitinib 200 mg (n=154), ●placebo (n=77) All treatments were administrated once daily for 12 weeks	• Percentage of pts achieving IGA response of clear (0) or almost clear (1) and ≥2 points improvement from BL to week 12 • Percentage of pts EASI response of at least 75% improvement from BL to week 12	• An IGA response was achieved in 24% of pts in the abrocitinib 100 mg arm vs. 8% of pts in the placebo arm; (p=0.0037) • An IGA response was achieved in 44% of pts in the abrocitinib 200 mg arm vs. 8% of pts in the placebo arm (p<0.0001) • EASI-75 response at week 12 was observed in 40% of pts in the abrocitinib 100 mg arm and in 3% of pts in the abrocitinib 200 mg arm vs. 12% of pts in the placebo arm (p<0.0001) [3]
JADE Mono-2 (NCT03575871) is a phase 3 randomized, double-blind, placebo-controlled, parallel group, multi-center study in pts aged ≥12 years, with moderate to severe AD	●abrocitinib 100 mg (n=158), ●abrocitinib 200 mg (n=155), ●placebo (n=78) All treatments were administrated once daily for 12 weeks	• Percentage of pts achieving IGA response of clear (0) or almost clear (1) and ≥2 points improvement from BL to week 12 • Percentage of pts EASI response of at least 75% improvement from BL to week 12	• An IGA response at week 12 was observed in 38.1% of pts in the 200 mg abrocitinib arm vs. 28.4% of pts in the 100 mg abrocitinib arm vs. 9.1% the placebo arm (p<0.001) • EASI-75 response at week 12 was observed in 61.0% of pts in the abrocitinib 200 mg group vs. 44.5% of pts in the abrocitinib 100 mg group vs. 10.4% placebo arm (p<0.001) [4]
JADE Compare (NCT03720470) is a phase 3 randomized, double-blind, placebo-controlled, parallel group, multicenter study, in adult pts with moderate to severe AD with inadequate response to treatment with medicated topical therapy for AD for at least four weeks, or who have required systemic therapies for control of their disease.	●abrocitinib 100 mg (n=238), orally once daily ●abrocitinib 200 mg (n=226), orally once daily ●dupilumab 300 mg (n=243) subcutaneously every other week ●placebo (n=131)	• Percentage of pts achieving IGA response of clear (0) or almost clear (1) and ≥2 points improvement from BL to week 12 • Percentage of pts EASI response of at least 75% improvement from BL to week 12	• An IGA response at week 12 was observed in 48.4% of pts in the 200-mg abrocitinib arm, 36.6% of pts in the 100-mg abrocitinib arm, 36.5% of pts in the dupilumab arm, and 14.0% of pts in the placebo arm (p<0.001 for both abrocitinib doses vs. placebo); • EASI-75 response at week 12 was observed in 70.3%, 58.7%, 58.1%, and 27.1% of pts, respectively (p<0.001 for both abrocitinib doses vs. placebo) [5]

Summary of clinical SAFETY [3-5]:

	JADE MONO-1			JADE MONO-2			JADE COMPARE			
ARMS	abrocitinib 100 mg	abrocitinib 200 mg	placebo	abrocitinib 100 mg	abrocitinib 200 mg	placebo	abrocitinib 100 mg	abrocitinib 200 mg	dupilumab 300 mg	placebo
TOTAL AEs	69%	78%	57%	62.7%	65.8%	53.8%	50.8%	61.9%	50.0%	53.4%
SERIOUS AEs	3%	3%	4%	3.2%	1.3%	1.3%	2.5%	0.9%	0.8%	3.8%
MOST FREQUENT NON SERIOUS AEs:										
NAUSEA	9%	20%	3%	7.6%	14.2%	2.6%	4.2%	11.1%	2.9%	1.5%
NASOPHARYN-GITIS	15%	12%	10%	12.7%	7.7%	6.4%	9.2%	6.6%	9.5%	6.9%
HEADACHE	8%	10%	3%	5.7%	7.7%	2.6%	4.2%	6.6%	5.4%	4.6%

Ongoing studies:
- ***For the same indication:*** Yes
- ***For other indications:*** Yes

Discontinued studies (for the same indication): No

NHS impact

Cost of therapy: According to ICER, the cost per QALY gained of abrocitinib is $148,300 [6].

Epidemiology: AD is one of the most common inflammatory disorders, in Italy: among adults the 1-year-prevalence is 8.1%. [7]

POSSIBLE PLACE IN THERAPY
The goal of treatment is to reduce symptoms (pruritus and dermatitis), prevent aggravation, and minimize therapeutic risks:
-1st-line therapies: Emollients and topical corticosteroids
-2nd-line: topical calcineurin inhibitors and antiseptics (included silver-coated textiles)
-3rd-line: Topical PDE-4 inhibitors [8]

OTHER INDICATIONS IN DEVELOPMENT: prurigo nodularis, plaque psoriasis [9]

SAME INDICATION IN EARLIER LINE(S) OF TREATMENT: -

OTHER DRUGS IN DEVELOPMENT for the SAME INDICATION: ruxolitinib, baricitinib, lebrikizumab, tradipitant, tapinarof [10]

*Service reorganization No
*Possible off label use Yes, in pts aged ≥12 years old

References:
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Issued on: