

SUPPLEMENTARY MATERIAL

Faricimab in the Treatment of Exudative Neovascular Age-Related Macular Degeneration and Diabetic Macular Edema in Italy: the FARIT Observational Study

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Statistical analysis—Cost estimate

Each resource necessary for the provision of the treatment and collected with the electronic survey, was evaluated using specific Italian tariffs (when possible) or data from published papers.

Total cost per patient was detailed in:

- Direct healthcare cost borne by National Health Service (due to management of the disease from Clinician Survey—Section 1):
 - time of healthcare personnel needed to administer the treatment
 - further therapies and exams prescribed
 - materials used to administer the therapy
- Direct healthcare cost borne by patients (Patient Survey—Section 2)
 - Drugs, visual devices, other therapies related to the disease
- Direct non-healthcare cost borne by patients (Patient Survey—Section 2)
 - Travel costs
- Societal cost (Patient Survey—Section 5 and Caregiver Survey—Sections 1 and 2)
 - Patients' productivity loss
 - Informal care

Supplementary Tables

Table S1 List of investigational sites

#	Centre	Principal investigator	Ethic Committee
01	Università Politecnica delle Marche	Prof. Lupidi	Ethics Committee of Regione Marche-CERM (protocol n. 2024/29) (coordinating committee)
02	Ospedale S. Severino Marche	Dott. Pirani	The site acknowledged the favorable opinion expressed by the Ethics Committee of Regione Marche-CERM, and authorized the conduct of the study (Determination no. 302, issued by the General Director of the Macerata Territorial Health Authority on July 26, 2024)
03	Università di Foggia	Prof. Iaculli	Ethics Committee "Ospedali Riuniti" Foggia (protocol n. CE150167
04	Università Vanvitelli di Napoli	Prof. Rossi	Ethics Committee Campania 2 (protocol n. OCE000000064)

Table S2 Demographic and clinical characteristics at baseline. Includes data from 81 patients (68 nAMD eyes and 19 DME eyes).

Variable	DME	nAMD	Total
General information			
Patients, n	16	65	81
Age, years			
– Mean (SD)	69.59 (10.70)	77.05 (7.80)	75.56 (8.90)
– Median (IQR)	67.05 (62.28–78.62)	76.23 (73.24–83.32)	75.60 (68.20–82.43)
– Range	55.71–87.74	60.1–93.05	55.71–93.05
Gender, n (%)			
– Male	11 (68.8%)	28 (43.1%)	39 (48.1%)
– Female	5 (31.3%)	37 (56.9%)	42 (51.9%)
Treated eyes			
– Total, n	19	68	87
Follow-up (months)			
– Mean (SD)	12.79 (2.97)	14.94 (3.23)	14.47 (3.28)
– Median (IQR)	13 (12–13.5)	15 (12–18)	14 (12–17)
– Range	6–19	6–20	6–20
Clinical features			
Visual acuity, EDTRS			
– Mean (SD)	63.68 (14.8)	53.65 (17.73)	55.84 (17.55)
– Median (IQR)	65 (60–72.5)	60 (35–65)	60 (37.5–70)
– Range	15–85	10–85	10–85
CST (μm)			
– Mean (SD)	455.11 (109.51)	413 (134.81)	422.2 (130.29)
– Median (IQR)	400 (384.5–525)	385.5 (332–502.25)	396 (339–503.5)
– Range	338–775	195–823	195–823
Presence of IRF, n (%)	19 (100)	55 (80.9)	74 (85.1)
Presence of SRF, n (%)	6 (31.6)	62 (91.2)	68 (78.2)
Irregularities in the ELM, n (%)	7 (36.8)	56 (82.4)	63 (72.4)
Irregularities in the EZ, n (%)	9 (47.4)	61 (89.7)	70 (80.5)
Time from symptoms to diagnosis (weeks) all patients			
– Mean (SD)	3.3 (2.3)	2.8 (2.4)	2.9 (2.3)
– Median (IQR)	3 (1.3–3)	2 (1.3–2)	2 (1.3–2)
– Range	0.4–8.9	0.1–12	0.1–12
Time from symptoms to diagnosis naïve patients, weeks			
– Mean (SD)	3.4 (2)	3.8 (3)	3.7 (2.8)
– Median (IQR)	4.9 (1.5–4.9)	2.9 (1.5–2.9)	3 (1.5–3)
– Range	0.9–5.3	0.1–12	0.1–12
Time from symptoms to diagnosis switch patients, weeks			
– Mean (SD)	3.1 (2.7)	2 (1.4)	2.3 (1.8)
– Median (IQR)	1.6 (1.3–1.6)	1.7 (0.9–1.7)	1.6 (1.2–1.6)
– Range	0.4–8.9	0.1–4.6	0.1–8.9
Major symptoms at diagnosis, n (%)			
– Visus reduction	16 (84.2)	60 (88.2)	76 (87.4)
– Scotoma	0 (0)	2 (2.9)	2 (2.3)
– Metamorphopsia	5 (26.3)	45 (66.2)	50 (57.5)
– Unknown	0 (0)	1 (1.5)	1 (1.1)
Ocular comorbidities, n (%)			
– Any	7 (36.8)	35 (51.5)	42 (48.3)

Variable	DME	nAMD	Total
– Cataract	6 (31.6)	31 (45.6)	37 (42.5)
– Glaucoma	1 (5.3)	3 (4.4)	4 (4.6)
– Other ¹	1 (5.3)	0 (0)	1 (1.1)
Non-ocular comorbidities, n (%)			
– Any	14 (73.7)	46 (67.6)	60 (69)
– Cardiovascular disorders	5 (26.3)	12 (17.6)	17 (19.5)
– Hypertension	12 (63.2)	35 (51.5)	47 (54)
– Other ²	1 (5.3)	11 (16.2)	12 (13.8)
<i>nAMD specific information</i>			
Presence of PED, n (%)	NA	34 (50)	NA
PED height (µm)			
– Mean (SD)	NA	225.06 (130.55)	NA
– Median (IQR)	NA	206 (148.5–297)	NA
– Range	NA	0–552	NA
Presence of SHRM, n (%)	NA	51 (75)	NA
Presence of sub-RPE fluid, n (%)	NA	50 (73.5)	NA
Presence of GA, n (%)	NA	5 (7.4)	NA
Presence of fibrosis, n (%)	NA	37 (54.4)	NA
nAMD lesion type, n (%)			
– Type 1 MNV	NA	41 (60.3)	NA
– PCV	NA	13 (19.1)	NA
– Type 2 MNV	NA	9 (13.2)	NA
– Type 3 MNV	NA	3 (4.4)	NA
– Unknown	NA	2 (2.9)	NA
<i>DME specific information</i>			
Presence of DRIL	7 (36.8)	NA	NA
Presence of ERM	3 (15.8)	NA	NA
Presence of VMT	1 (5.3)	NA	NA
Type of diabetes, n (%)			
– Type 1	0 (0)	NA	NA
– Type 2	19 (100)	NA	NA
Duration of diabetes, years			
– Mean (SD)	17.24 (9.79)	NA	NA
– Median (IQR)	15 (10–17)	NA	NA
– Range	5–36	NA	NA
DRSS			
– Mean (SD)	49.67 (9.41)	NA	NA
– Median (IQR)	46 (43–51.5)	NA	NA
– Range	42–72	NA	NA
Previous treatment and surgery			
Previous anti-VEGF treatments, n (%)			
– No (naïve)	9 (47.4)	24 (35.3)	33 (37.9)
– Yes (switch)	10 (52.6)	44 (64.7)	54 (62.1)
Time from diagnosis to first faricimab administration, only naïve patients (weeks)			
– Mean (SD)	8.46 (4.63)	3.73 (2.83)	4.91 (3.89)
– Median (IQR)	8.07 (5.32–11.5)	2.86 (1.93–4.64)	3.57 (2.43–6)
– Range	1.71–15.71	0.57–13.57	0.57–15.71
Number of previous anti-VEGF treatments			

Variable	DME	nAMD	Total
– Mean (SD)	1.44 (0.88)	1.7 (0.85)	1.66 (0.85)
– Median (IQR)	1 (1–1)	1.5 (1–2)	1 (1–2)
– Range	1–3	1–4	1–4
Reason for switching to faricimab			
– Inability to ETI	1 (10)	3 (6.8)	4 (7.4)
– Persistent fluid	7 (70)	43 (97.7)	50 (92.6)
– Unknown	3 (30)	0 (0)	3 (5.6)
Other previous ocular treatment			
– Any	8 (36.8)	2 (2.9)	10 (11.5)
– Laser therapy	7 (87.5)	0 (0)	7 (70)
– PDT	0 (0)	2 (100)	2 (20)
– Dexamethasone	3 (37.5)	0 (0)	3 (30)
Previous ocular surgery			
– Cataract	5 (26.3)	21 (30.9)	26 (29.9)

¹ Synchysis scintillans; ² 31% Benign prostatic hyperplasia, 31% metabolic disease, 13% other cancers, 13% inflammatory disease; 6% COPD, 6% Parkinson

DRSS: Diabetic Retinopathy Severity Scale CST: Central subfield thickness; DRIL: disorganization of retinal inner layers; ELM: external limiting membrane; ERM: epiretinal membrane; EZ: ellipsoid zone; GA: geographic atrophy; IRF: intra- retinal fluid; PED: pigment epithelial detachment; RPE: retinal pigment epithelium; SHRM: subretinal hyper-reflective material; SRF: sub-retinal fluid; VMT: vitreomacular traction

Table S3 Baseline clinical features in naïve (33/87 eyes; 24/68 nAMD, 9/19 DME) and switch (54/87 eyes; 44/68 nAMD, 10/19 DME)

Clinical features	DME	nAMD	Total
Naïve			
N eyes	9	24	33
CST (μm)			
– Mean (SD)	425 (86.27)	450.17 (149.99)	443.3 (134.76)
– Median (IQR)	396 (357–497)	430.5 (336.75–550)	400 (343–546)
– Range	338–555	195–823	195–823
Presence of IRF, n (%)	9 (100)	19 (79.2)	74 (85.1)
Presence of SRF, n (%)	1 (11.1)	21 (87.5)	68 (78.2)
Irregularities in the ELM, n (%)	2 (22.2)	18 (75)	63 (72.4)
Irregularities in the EZ, n (%)	2 (22.2)	21 (87.5)	70 (80.5)
<i>nAMD specific information</i>			
Presence of PED, n (%)		7 (29.2)	
PED height (μm)			
– Mean (SD)		329.17 (142.24)	
– Median (IQR)		329.5 (223.5–391.25)	
– Range		164–552	
Presence of SHRM, n (%)		15 (62.5)	
Presence of sub-RPE fluid, n (%)		14 (58.3)	
Presence of GA, n (%)		2 (8.3)	
Presence of fibrosis, n (%)		8 (33.3)	
<i>DME specific information</i>			
Presence of DRIL, n (%)	3 (33.3)		
Presence of ERM, n (%)	1 (11.1)		
Presence of VMT, n (%)	0 (0)		
Switch			
N eyes	10	44	54
CST (μm)			
– Mean (SD)	482.2 (125.08)	392.73 (122.85)	409.3 (127.02)

Clinical features	DME	nAMD	Total
– Median (IQR)	437 (399.25–535.5)	369.5 (319–452.25)	390.5 (337–468)
– Range	377–775	227–805	227–805
Presence of IRF, n (%)	10 (100)	36 (81.8)	74 (85.1)
Presence of SRF, n (%)	5 (50)	41 (93.2)	68 (78.2)
Irregularities in the ELM, n (%)	5 (50)	38 (86.4)	63 (72.4)
Irregularities in the EZ, n (%)	7 (70)	40 (90.9)	70 (80.5)
<i>nAMD specific information</i>			
Presence of PED, n (%)		27 (61.4)	
PED height (μm)			
– Mean (SD)		227.26 (97.73)	
– Median (IQR)		209 (151–290.5)	
– Range		100–425	
Presence of SHRM, n (%)		36 (81.8)	
Presence of sub-RPE fluid		36 (81.8)	
Presence of GA, n (%)		3 (6.8)	
Presence of fibrosis, n (%)		29 (65.9)	
<i>DME specific information</i>			
Presence of DRIL, n (%)	4 (40)		
Presence of ERM, n (%)	2 (20)		
Presence of VMT, n (%)	1 (10)		
CST (μm)			
– Mean (SD)	425 (86.27)	450.17 (149.99)	443.3 (134.76)

DRSS: Diabetic Retinopathy Severity Scale CST: Central subfield thickness; DRIL: disorganization of retinal inner layers; ELM: external limiting membrane; ERM: epiretinal membrane; EZ: ellipsoid zone; GA: geographic atrophy; IRF: intra- retinal fluid; PED: pigment epithelial detachment; RPE: retinal pigment epithelium; SHRM: subretinal hyper-reflective material; SRF: sub-retinal fluid; VMT: vitreomacular traction

Table S4 Characteristics of faricimab administration in naïve (n=33) and switch (n=54) eyes

Faricimab schedule		DME	nAMD	Total
Naïve	N eyes	9	24	33
Follow-up (months)	Mean (SD)	12.44 (3.57)	15.63 (3.59)	14.76 (3.81)
	Median (IQR)	12 (12–13)	17.5 (13–18.25)	14 (12–18)
	Range	5–19	7–20	5–20
Total number of IVT administration	Mean (SD)	6.11 (0.78)	6.92 (1.56)	6.7 (1.42)
	Median (IQR)	6 (6–7)	7 (6–8)	7 (6–7)
	Range	5–7	4–10	4–10
<i>Loading phase</i>				
Time between any loading dose (weeks)	Mean (SD)	4.39 (0.82)	4.95 (1.35)	4.9 (1.31)
	Median (IQR)	4 (4–4.19)	4.88 (4–5.06)	4.71 (4–5.14)
	Range	3.86–8.86	1.43–11	1–11
Switch	N eyes	10	44	54
Follow-up (months)	Mean (SD)	13.1 (2.47)	14.57 (2.99)	14.3 (2.94)
	Median (IQR)	13 (12–13.75)	14.5 (12–17)	14 (12–17)
	Range	10–18	7–20	7–20
Total number of IVT administration	Mean (SD)	6.4 (1.43)	6.98 (1.25)	6.87 (1.29)
	Median (IQR)	6 (6–7)	7 (6–8)	7 (6–8)
	Range	4–9	5–9	4–9
<i>Loading phase</i>				
Time between any loading dose (weeks)	Mean (SD)	4.5 (0.79)	5.07 (1.33)	4.9 (1.31)
	Median (IQR)	4.33 (4–4.71)	4.88 (4.13–5.4)	4.71 (4–5.14)
	Range	3–8.57	1–10.86	1–11

IQR: interquartile range; IVT: intravitreal therapy; SD: standard deviation

Table S5 Therapy delivery process. Data derived from structured survey completed by 4 clinicians (one per site).

Variable	Mean	Min	Max
Active HCP time (minutes)			
Patient admission	11.25	5	15
Patient preparation	8.25	3	15
IVT administration	5.50	3	10
Monitoring post IVT	4.75	2	10
Total time spent by the patient in the center	96.25	40	180
IVT administered in the last 12 months (mean per patient)	6.00	6	6
Mean number of procedure (per patient) in the last 12 months			
Laser therapy	0.25	0	1
Vitrectomy	0.25	0	1
HCP involved in each IVT administration			
Doctors (N)	1.50	1	2
Doctors (minutes)	5.50	3	10
Nurse (N)	1.75	1	3
Nurse (minutes)	8.75	5	10
Pharmacist (N)	0.25	0	1
Pharmacist (minutes)	0.25	0	1
Orthoptist (N)	0.50	0	1
Orthoptist (minutes)	3.75	0	10
Exams in the last 12 months			
Computed optical tomography	6.75	5	8
Retinal fluorescein angiography	0.75	0	1
Ophthalmoscopy	6.75	5	8
Tonometry	5.75	4	8
Visual acuity	6.75	5	8
OCT angiography	5.25	0	8
Supplies used for IVT administration			
Surgical microscope	0.50	0	1
Equipment for fluorescence angiography	0.33	0	1

Variable	Mean	Min	Max
Pliers	0.00	0	0
Scissors	0.33	0	1
Needles for intravitreal injection	1.00	1	1
Optics adapted for intravitreal administration	0.00	0	0
Slit lamp	0.75	0	1
Disinfectant solutions	1.00	1	1
Gauze	2.00	1	4
Electronic monitoring system during the procedure	0.00	0	0
Electronic medical documentation system	0.00	0	0

IVT: intravitreal therapy; HCP: healthcare professional; OCT: optical coherence tomography

Table S6 Economic evaluation: total costs per patient of 12 months of treatment with faricimab from NHS, patient, and societal perspective. Costs calculated based on 12-month treatment and survey data from 81 patients and 19 caregivers.

	NHS perspective	Patient perspective	Societal perspective
Direct healthcare costs (€)	1,223.79	952.87	2,176.66
HCP time for IVT administrations	130.64		130.64
Supplies ¹	27.36	80.73	108.09
Monitoring and other therapies	1,065.79	872.14	1,937.93
Direct non healthcare costs (€)		123.27	126.78
Transport		123.27	126.78
Indirect costs (€)		153.82	832.86
Paid-work lost		153.82	153.82
Unpaid-work lost			53.21
Informal care (caregiver)			625.83
Total costs over 12 months (€)	1,223.79	1,229.96	3,136.30
Total cost per IVT administration (€)	215.14	216.23	551.36

¹ In the NHS perspective supplies included surgical microscope, fluorescence angiography equipment, scissors, needles for intravitreal injection, slit lamp, disinfectant solutions, gauze; in the patient supplies included contact lens and visual aids

NHS: National Health Service; IVT: intravitreal therapy

Table S7 Patients (n=78) and caregivers (n=19) characteristics related to economic evaluation of IVT injection

IVT injection logistic	Mean (IQR)
Number of IVT injections in the last 12 months	5.7 (4–7)
Time spent in the center for each IVT injection	2 hours (1–3.3)
Distance from the center	32.6 Km (10–50)
Total time per IVT administration ¹	3.7 hours (1.5–5.8)
Patients' characteristics	Mean (IQR) or proportion
Age	75.4 years (67–83)
% male	45.9%
% employed	11.5%
% accompanied by a caregiver in the last month	38.5%
Caregivers' characteristics	Mean (IQR) or proportion
Age	61.1 years (51–74)
% male	23.5%
% employed	43.3%

¹ Calculated as the sum of time spent in the center for each IVT injections and the time to reach the center (round-trip) assuming an average speed of 40 km/h

IQR: interquartile range; IVT: intravitreal therapy; SD: standard deviation

Supplementary Figures

Figure S1 Distribution of last anti-VEGF treatment (among switch eyes) before starting faricimab. Includes data from 54 eyes (44 nAMD, 10 DME) previously treated with anti-VEGFs.

