### Safety of Intravitreal Pegcetacoplan for Geographic Atrophy (GA): 18-Month Results from the DERBY and OAKS trials

Caroline Baumal, Allen Ho, Jordi Mones, Preeti Joshi, Caleb Bliss, Ravi Metlapally, Jeffrey Heier

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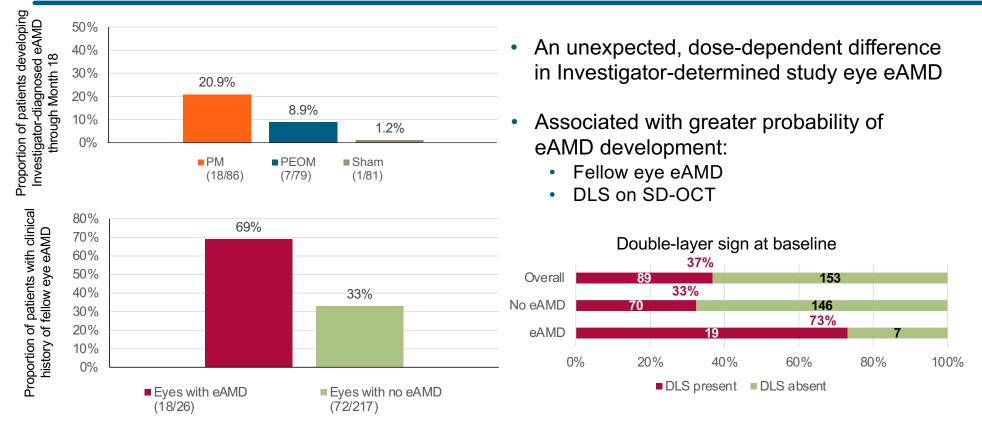


### Disclosures

Studies funded by Apellis Pharmaceuticals



### Phase 2 FILLY trial: New-onset study eye eAMD



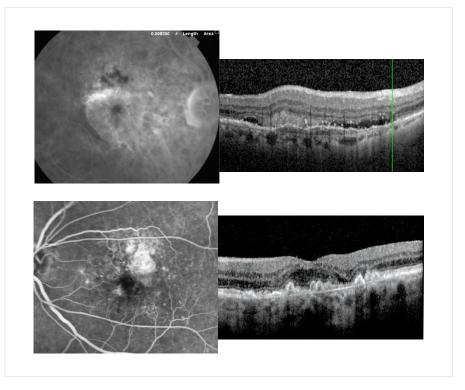
AMD=age-related macular degeneration; DLS=double-layer sign; eAMD=exudative AMD; PEOM=pegcetacoplan every other month; PM=pegcetacoplan monthly; SD-OCT=spectral domain optical coherence tomography. Wykoff CC et al. *Ophthalmology* 2021;128:1325–36.

# FILLY post hoc analysis of CNV detected on FA at time of eAMD report

#### Fluorescein angiography:

Acquired in 17/26 (65%) eyes at the time of eAMD diagnosis

- 10 eyes had detectable CNV
  - All categorized as occult
- 7 eyes had no detectable CNV



Images graded by DARC.

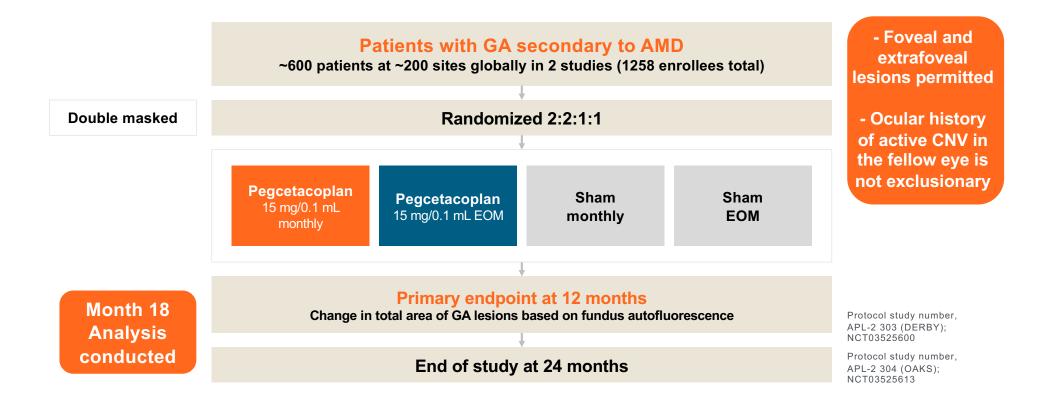
CNV=choroidal neovascularization; DARC=Digital Angiography Reading Center; eAMD=exudative age-related macular degeneration; FA=fluorescein angiography. Wykoff CC et al. *Ophthalmology* 2021;128:1325–36.

# eAMD findings from FILLY informed the design of the Phase 3 program

- If eAMD is suspected, prespecified imaging (CFP, OCT, FA and OCTA [select sites]) is captured
- Once eAMD is verified by masked reading center, patients remain on study treatment and should also be treated with on-label anti-VEGF pharmacotherapy
  - Initiation of anti-VEGF therapy for eAMD is at the discretion of the Investigator and is not reading-center determined
- Within the reporting from DERBY and OAKS
  - Reports of eAMD include <u>all</u> AEs reported by the Investigator falling within the preferred terms neovascular AMD or CNV

AE=adverse event; AMD=age-related macular degeneration; CFP=color fundus photography; CNV=choroidal neovascularization; eAMD=exudative AMD; FA=fluorescein angiography; OCT=optical coherence tomography; OCTA=OCT angiography; VEGF=vascular endothelial growth factor.

### Global Phase 3 program: Design of DERBY and OAKS studies



AMD=age-related macular degeneration; CNV=choroidal neovascularization; EOM=every other month; GA=geographic atrophy.

## Pegcetacoplan reduced GA lesion growth vs sham in **DERBY** and **OAKS** at **Month 18**

DERBY OAKS 3.5 3.5 13% (monthly) reduction 22% (monthly) reduction p=0.0254 (nominal) vs sham p<0.0001 (nominal) vs sham 3.0 3.0 12% 13% 12% (every other month) reduction 16% (every other month) reduction 16% p=0.0332 (nominal) vs sham p=0.0018 (nominal) vs sham 2.5 2.5 2.0 2.0 1.5 1.5 1.0 1.0 0.5 0.5 0.0 0.0 Baseline M2 M4 M6 M8 M10 M12 M14 M16 M18 Baseline M2 M4 M6 M8 M10 M12 M14 M16 M18 **PM** (n=201) Sham (n=195, pooled) **PEOM** (n=201) Sham (n=207, pooled) **PEOM** (n=205) **PM** (n=202)

LS means estimated from a mixed-effects model for repeated measures. The modified intent-to-treat population was used for the analysis, defined as all randomized patients who received at least 1 injection of pegcetacoplan or sham and have baseline and at least 1 post-baseline value of GA lesion area in the study eye. GA=geographic atrophy; LS=least squares; M=month; PEOM=pegcetacoplan every other month; PM=pegcetacoplan monthly; SE=standard error.

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### Investigator-reported events of eAMD through Month 18<sup>a</sup>

|  | DERBY         |                 |                           | OAKS          |                               |                           |
|--|---------------|-----------------|---------------------------|---------------|-------------------------------|---------------------------|
|  | РМ<br>(N=206) | PEOM<br>(N=208) | Sham<br>Pooled<br>(N=206) | РМ<br>(N=213) | PEOM<br>(N=212 <sup>b</sup> ) | Sham<br>Pooled<br>(N=211) |
| Patients with <b>study eye</b><br>Investigator-determined<br>new-onset eAMD, n (%) | 24 (11.7%)    | 11 (5.3%)       | 8 (3.9%)                  | 16 (7.5%)     | 15 (7.1%)                     | 4 (1.9%)                  |

| COMBINED STUDIES                              | PM                       | PEOM                     | Sham Pooled              |
|---|--------------------------|--------------------------|--------------------------|
|   | (N=419)                  | (N=420 <sup>b</sup> )    | (N=417)                  |
| Investigator-determined new-onset eAMD, n (%) | 40 ( <mark>9.5%</mark> ) | 26 ( <mark>6.2%</mark> ) | 12 ( <mark>2.9%</mark> ) |

<sup>a</sup>Events include preferred terms of CNV and neovascular AMD.

<sup>b</sup>One patient in OAKS had CNV on medical history in study eye and is not counted in the denominator for this analysis; 211 patients were at risk of new-onset eAMD. AMD=age-related macular degeneration; CNV=choroidal neovascularization; eAMD=exudative AMD; n=number of patients; PEOM=pegcetacoplan every other month; PM=pegcetacoplan monthly.

# Investigator-reported events of eAMD through Month 18 by baseline fellow eye CNV and baseline study eye DLS status<sup>a</sup>

| COMBINED STUDIES                     | PM                           | PEOM                         | Sham Pooled                 |
|--------------------------------------|------------------------------|------------------------------|-----------------------------|
| eAMD n/N (%), fellow eye CNV present | 8/84 ( <mark>9.5%</mark> )   | 8/81 ( <mark>9.9%</mark> )   | 7/86 ( <mark>8.1%</mark> )  |
| eAMD n/N (%), fellow eye CNV absent  | 32/335 ( <mark>9.6%</mark> ) | 18/338 ( <mark>5.3%</mark> ) | 5/331 ( <mark>1.5%</mark> ) |

| COMBINED STUDIES                    | PM                           | PEOM                         | Sham Pooled                  |
|-------------------------------------|------------------------------|------------------------------|------------------------------|
| eAMD n/N (%), study eye DLS present | 8/79 ( <mark>10.1%</mark> )  | 6/73 ( <mark>8.2%</mark> )   | 0/63 ( <mark>0%</mark> )     |
| eAMD n/N (%), study eye DLS absent  | 32/336 ( <mark>9.5%</mark> ) | 20/345 ( <mark>5.8%</mark> ) | 11/349 ( <mark>3.2%</mark> ) |

<sup>a</sup>Events include preferred terms of CNV and neovascular AMD.

AMD=age-related macular degeneration; CNV=choroidal neovascularization; DLS=double-layer sign; eAMD=exudative AMD; n=number of patients; PEOM=pegcetacoplan every other month; PM=pegcetacoplan monthly.

# Characteristics of Investigator-reported eAMD events through Month 18<sup>a</sup>

| COMBINED STUDIES                                 | PM<br>(N=26)              | PEOM<br>(N=21)            | Sham Pooled<br>(N=11)     |  |
|--|---------------------------|---------------------------|---------------------------|--|
| CNV type on FA at eAMD study visit               |                           |                           |                           |  |
| Classic, n (%)                                   | 1 (3.8%)                  | 1 (4.8%)                  | 0                         |  |
| Occult, n (%)                                    | 22 ( <mark>84.6%</mark> ) | 20 ( <mark>95.2%</mark> ) | 10 ( <mark>90.9%</mark> ) |  |
| Classic + occult, n (%)                          | 0                         | 0                         | 0                         |  |
| Active leakage with low likelihood of CNV, n (%) | 3 (11.5%)                 | 0                         | 1 (9.1%)                  |  |

Table includes events with available reading center determination of CNV type on FA at time of eAMD study visit

• All patients had evaluable SD-OCT at time of eAMD study visit; majority of events showed no subretinal fluid

<sup>&</sup>lt;sup>a</sup>Events include preferred terms of CNV and neovascular AMD. Events with no available reading center determination of CNV type on FA at time of eAMD are not included here. AMD=age-related macular degeneration; CNV=choroidal neovascularization; eAMD=exudative AMD; FA=fluorescein angiography; n=number of patients; PEOM=pegcetacoplan every other month; PM=pegcetacoplan monthly; SD-OCT=spectral domain optical coherence tomography.

### Cases of eAMD in fellow eyes through 18 months<sup>a</sup>

|               | OAKS            |   |  | DERBY   |   |  |
|---------------|-----------------|---|--|---|---|--|
| РМ<br>(N=213) | PEOM<br>(N=212) | Sham<br>Pooled<br>(N=211)               | РМ<br>(N=206)  | PEOM<br>(N=206)   | Sham<br>Pooled<br>(N=206)   |  |
| 168           | 173             | 167                                     | 167  | 166   | 164   |  |
| 8 (4.8%)      | 5 (2.9%)        | 7 (4.2%)                                | 4 (2.4%)   | 8 (4.8%)  | 6 (3.7%)  |  |
| _             | (N=213)<br>168  | PM<br>(N=213) PEOM<br>(N=212)   168 173 | PM<br>(N=213)PEOM<br>(N=212)Sham<br>Pooled<br>(N=211)168173167 | PM<br>(N=213) PEOM<br>(N=212) Sham<br>Pooled<br>(N=211) PM<br>(N=206)   168 173 167 167 | PM<br>(N=213) PEOM<br>(N=212) Sham<br>Pooled<br>(N=211) PM<br>(N=206) PEOM<br>(N=206)   168 173 167 167 166 |  |

| COMBINED STUDIES                              | РМ<br>(N=419)            | (N=420)                  | (N=417)                  |
|---|--------------------------|--------------------------|--------------------------|
| Patients without baseline fellow eye CNV, N   | 335                      | 339                      | 331                      |
| Investigator-determined new-onset eAMD, n (%) | 12 ( <mark>3.6%</mark> ) | 13 ( <mark>3.8%</mark> ) | 13 ( <mark>3.9%</mark> ) |

<sup>a</sup>Events include preferred terms of CNV and neovascular AMD.

AMD=age-related macular degeneration; CNV=choroidal neovascularization; eAMD=exudative AMD; N=number of patients; PEOM=pegcetacoplan every other month; PM=pegcetacoplan every month;

### Conclusions

- Pegcetacoplan was well tolerated through Month 18
- Definitions of eAMD were identical across FILLY, DERBY, and OAKS; all adverse events of eAMD are reported<sup>a</sup>
- In DERBY and OAKS pooled, 9.5%, 6.2%, and 2.9% of patients in the combined PM, PEOM, and sham groups experienced new-onset Investigator-determined eAMD over 18 months
  - The majority of eAMD events with available images at time of exudation were classified as occult by the reading center
- IOI and endophthalmitis rates were low and consistent with those from other IVT studies
  - IOI: 2.1% at 18 months
    - 0.23% per injection (0.19% if excluding the 4 early cases attributed to drug impurity)
    - No reports of retinitis or vasculitis (occlusive or non-occlusive)
  - Infectious endophthalmitis: 0.5% over 18 months (0.044% per injection)

<sup>a</sup>Preferred terms of neovascular AMD and CNV.

AMD=age-related macular degeneration; CNV=choroidal neovascularization; eAMD=exudative AMD; PEOM=pegcetacoplan every other month; PM=pegcetacoplan monthly. IOI = intraocular inflammation