INTRAVITREAL INJECTIONS

The Art of Precision

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I HAVE NO FINANCIAL INTEREST TO DISCLOSE

FACTS..

Paradigm shift in managing retinal disorders.

Most frequently performed eye procedure in the world *

Safety issues:

> Severe adverse events, e.g., infectious and noninfectious endophthalmitis, cataract, ocular hypertension, vitreous Hge, or RD.

> Uneeded excess injections (economic, psychologic burden)

When not inject….When to stop injections?

Accurate diagnosis and precise tailoring of treatment

* Grzybowski A, Told R, Sacu S, et al. Euretina Board. 2018 update on intravitreal injections: Euretina expert consensus recommendations. *Ophthalmologica*. 2018;239(4):181–193.

ON-LABEL USE OF IV ANTIVGEF

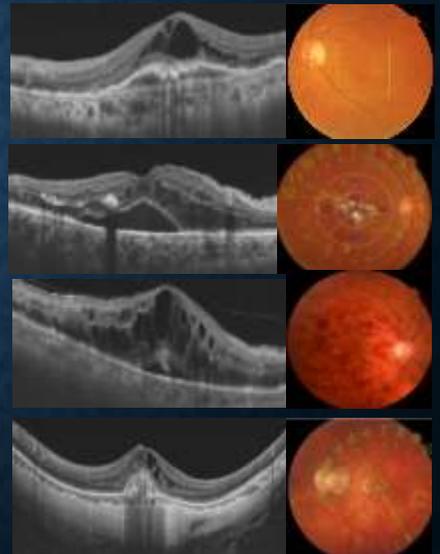N-AMD, DME and RVOs, myopic CNVM, and PDR

TAE / PRN

Load or not ?

Indication of reinjection: VA-Hge-IR/SR fluid
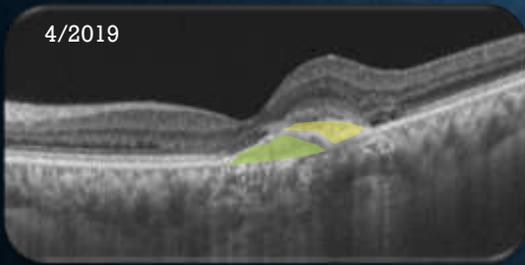
Tailor ttt according patient response
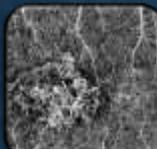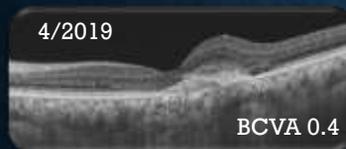
Switch

CASE SCENARIOS

CASE 1 "Every Journey has an end"

65 y male
DOV OS with metmorphopsia
Hypertensive on ttt
BCVA 0.4
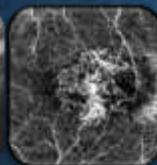Received multiple injections elsewhere
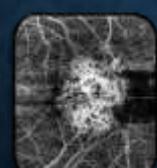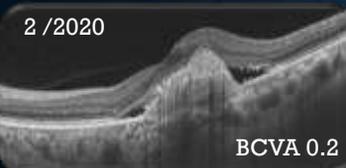

4/2019

CASE 1 "Every Journey has an end"

65 y male
BCVA 0.4

4/2019 — BCVA 0.4 — Aflibercept

9 /2019 — BCVA 0.3

Lost follow up

2 /2020 — BCVA 0.2 — Ranibizumab

CASE 1 "Every Journey has an end"   65 y male
BCVA 0.4

4/2019
9 /2019
2 /2020
5 /2020
BCVA 0.3
Aflibercept
Ranibizumab

CASE 1 "Every Journey has an end"   65 y male
BCVA 0.4

4/2019
9 /2019
2 /2020
5 /2020
Aflibercept
Ranibizumab
Ranibizumab
COVID

CASE 1 "Every Journey has an end" — 65 y male, BCVA 0.4

9 /2020 — BCVA 0.1

Ranibizumab

3 /2021 — BCVA 0.1

CASE 1 "Every Journey has an end" — 65 y male, BCVA 0.4

9 /2020

3 /2021

9 /2021

11 /2021

2 /2022

CASE 1 "Every Journey has an end" — 65 y male, BCVA 0.4

9 /2020 · 11 /2021 · 3 /2021 · 2 /2022

CASE 1 "Every Journey has an end" — 65 y male, BCVA 0.4
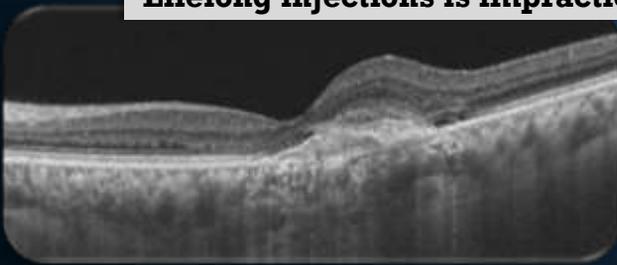
9 /2020 · 11 /2021 · 3 /2021 · 2 /2022 · 9 /2021 · 5 /2022 — BCVA 0.1
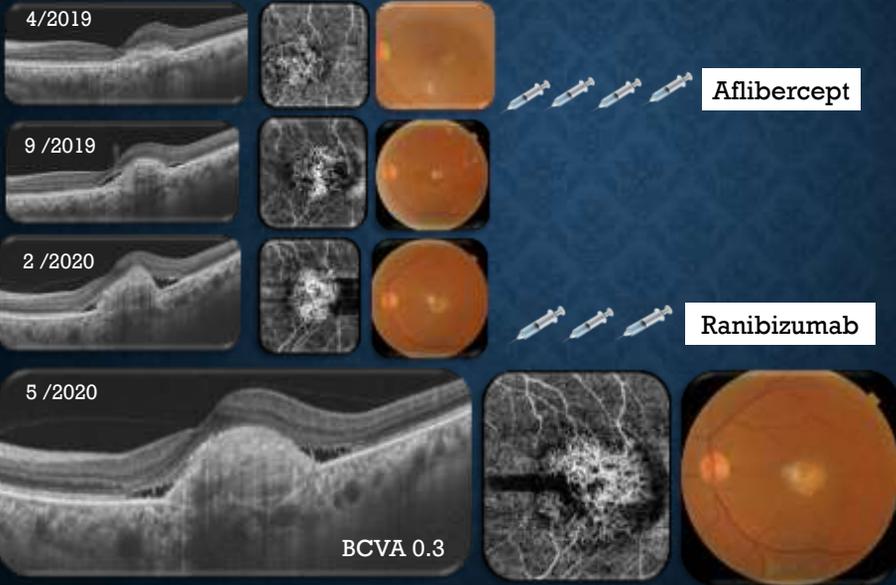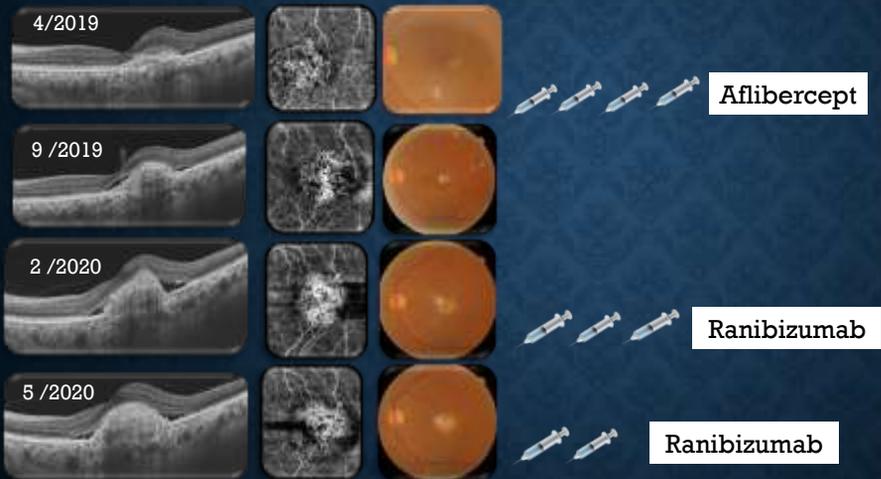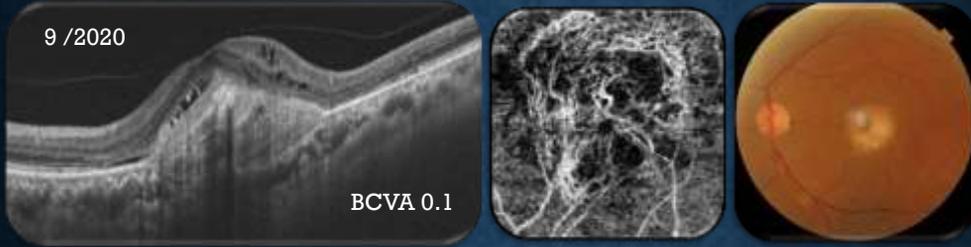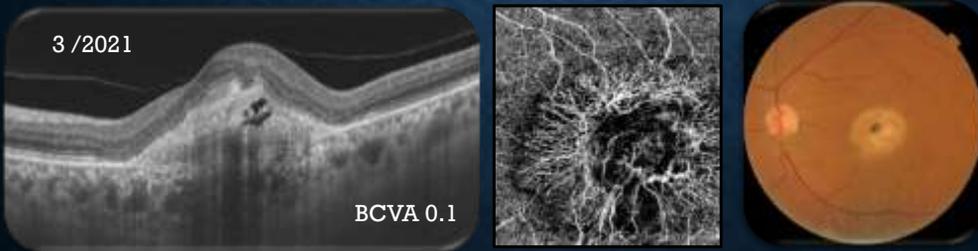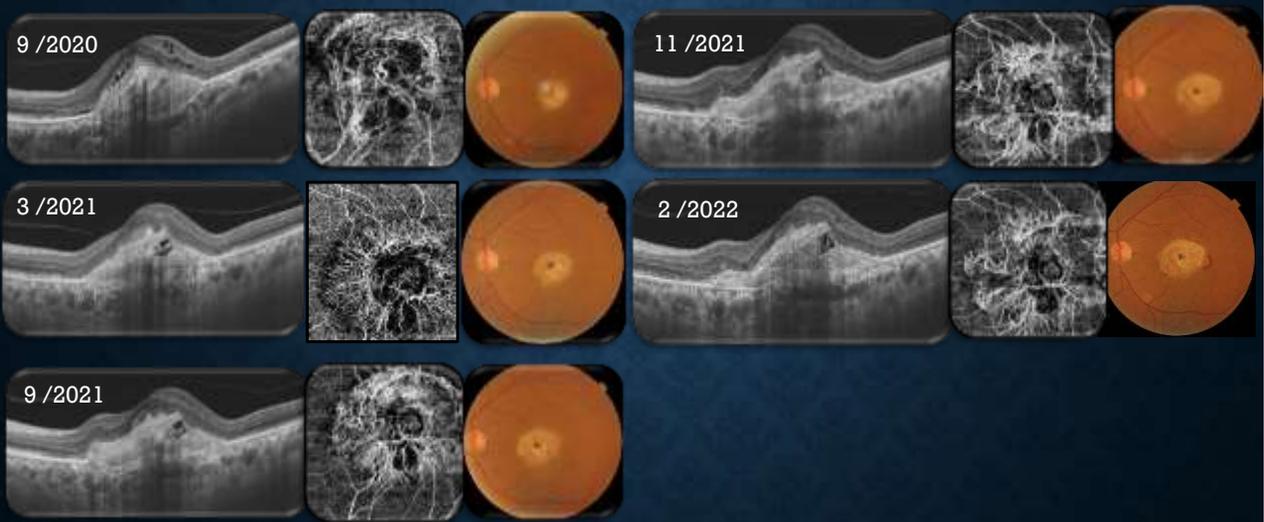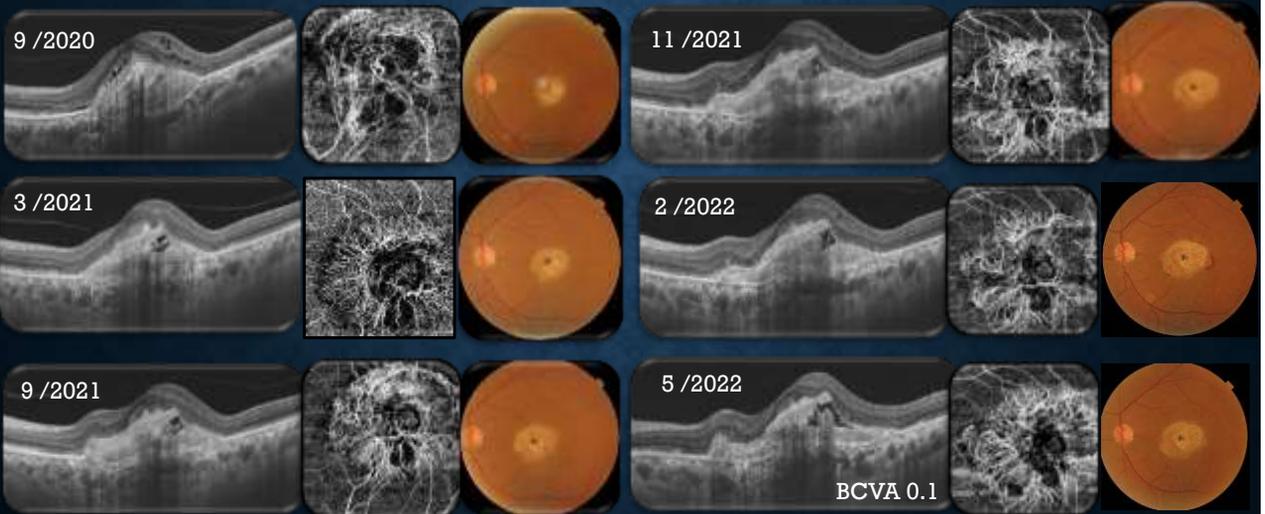
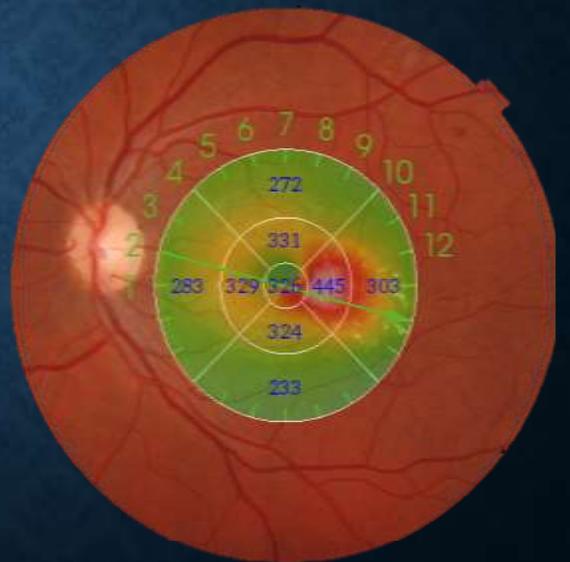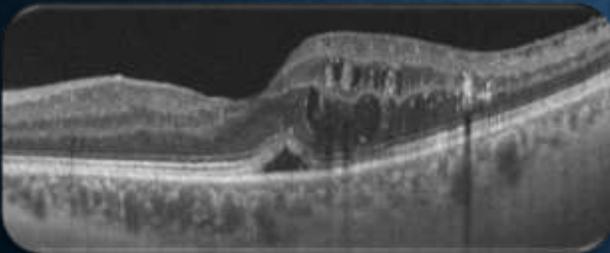## CASE 1 "Every Journey has an end"
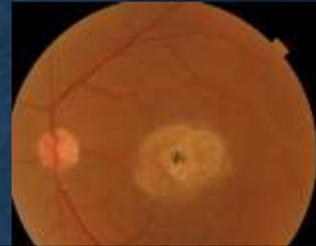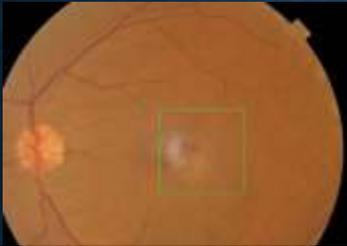
**We should always know when to stop
Lifelong injections is impractical and have its serious sequelae**
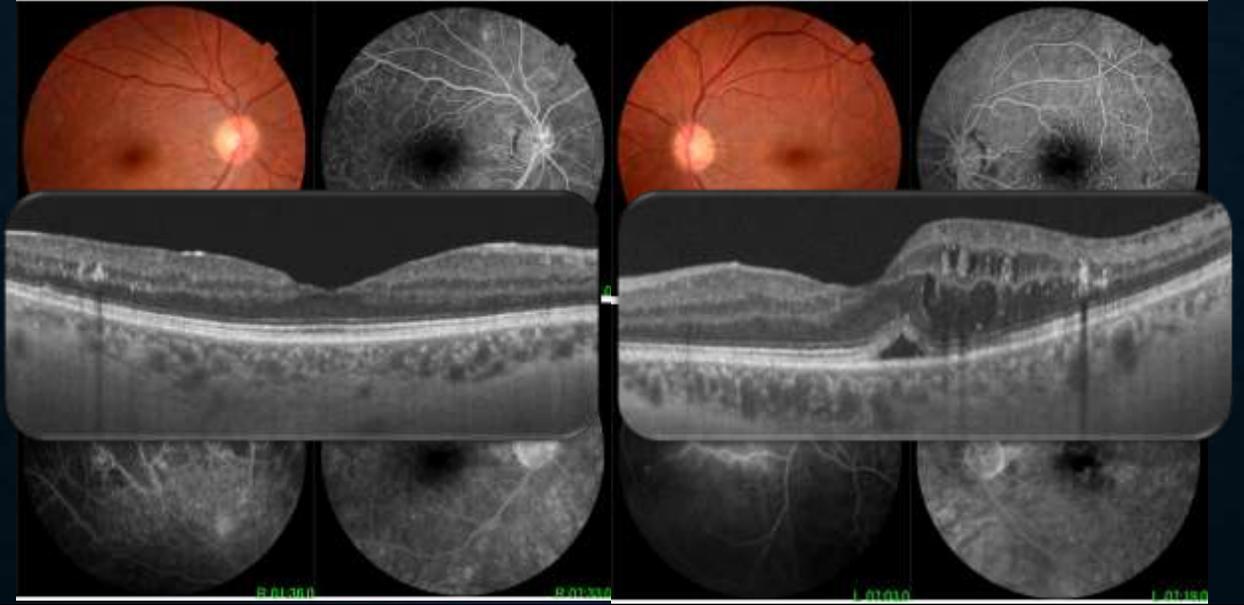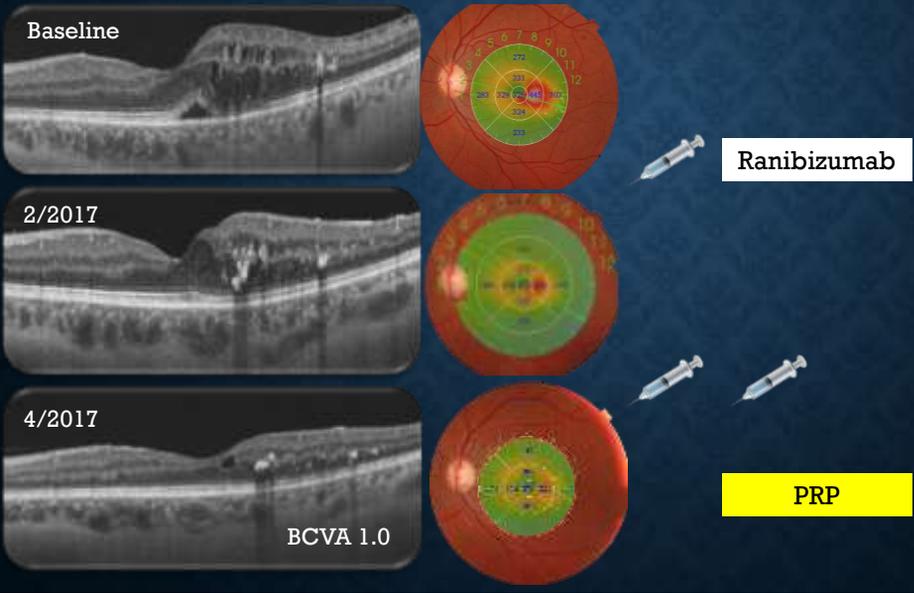
CASE 2 "No Need to Rush"

32 y male
DOV OS BCVA 0.3 OD 1.0
IDDM 10 years , bilateral pseudophakia

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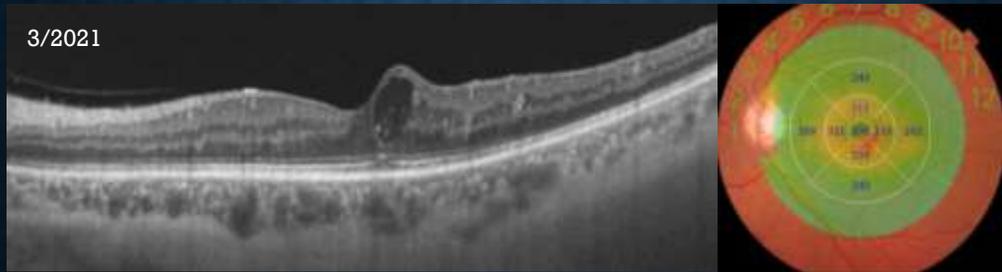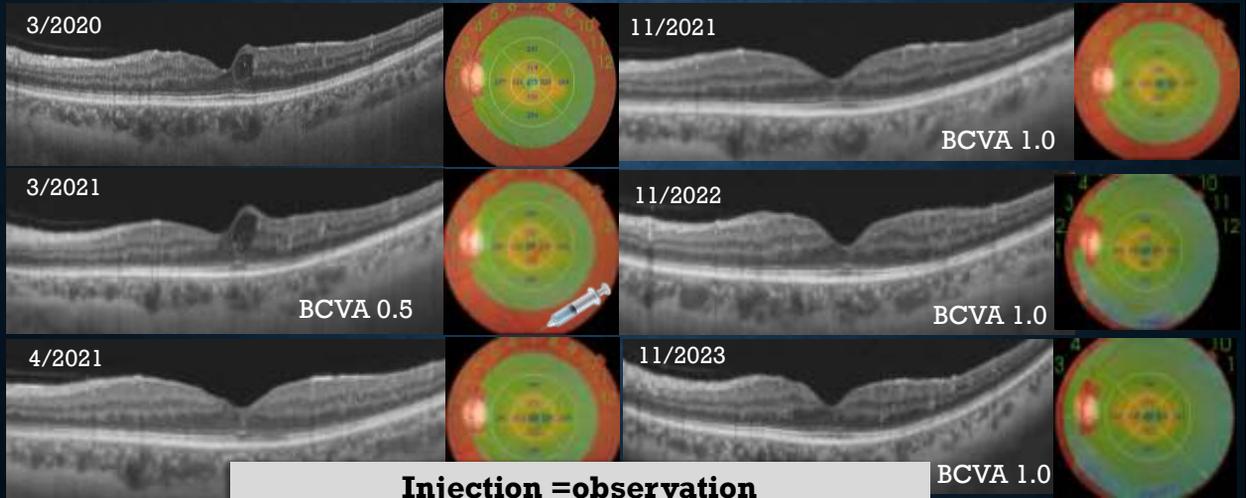IDDM 10 years , bilateral pseudophakia

CASE 2 "No Need to Rush"

32 y male
DOV OS BCVA 0.3 OD 1.0
IDDM 10 years , bilateral pseudophakia

Baseline

2/2017

4/2017

BCVA 1.0

Ranibizumab

PRP

CASE 2 "No Need to Rush"

32 y male
DOV OS BCVA 0.3 OD 1.0
IDDM 10 years , bilateral pseudophakia

BCVA 1.0

CASE 2 "No Need to Rush"

32 y male
DOV OS BCVA 0.3 OD 1.0
IDDM 10 years , bilateral pseudophakia

3/2021

Ranibizumab

BCVA 0.6

CASE 2 "No Need to Rush"

32 y male
DOV OS BCVA 0.3 OD 1.0
IDDM 10 years , bilateral pseudophakia

3/2020

11/2021

BCVA 1.0

3/2021

BCVA 0.5

11/2022

BCVA 1.0

4/2021

11/2023

BCVA 1.0

**Injection =observation
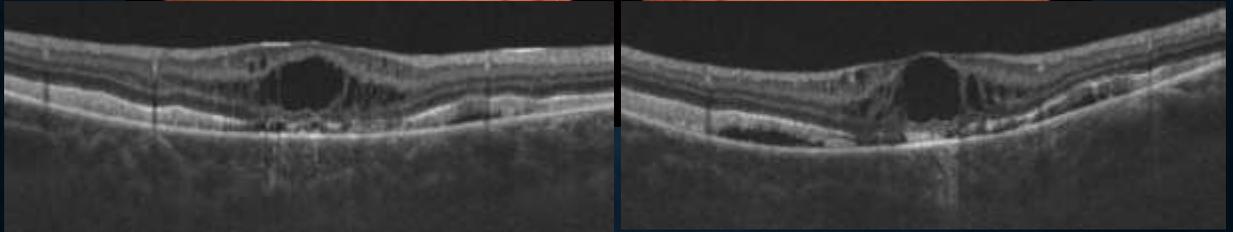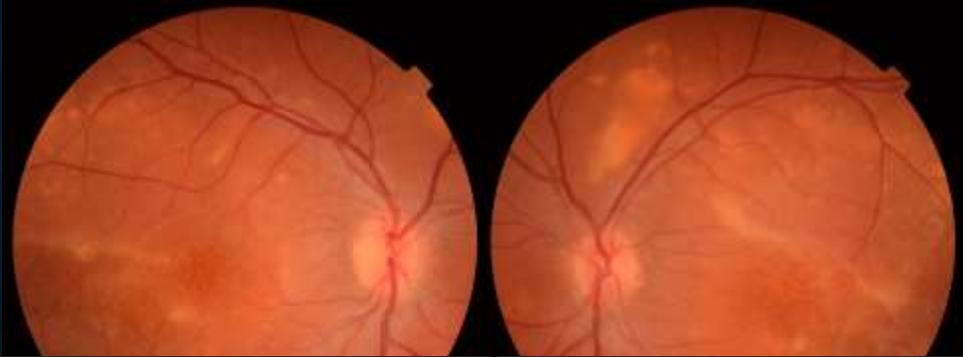in CI-DME if VA 20/25 or better (protocol V)**

CASE 3 "Don't jump into conclusions"

26 y male
Progressive DOV OU of 6 years duration
BCVA 0.4
Received 2 AntiVGEF injections and intravitreal steroid 2 years ago elsewhere
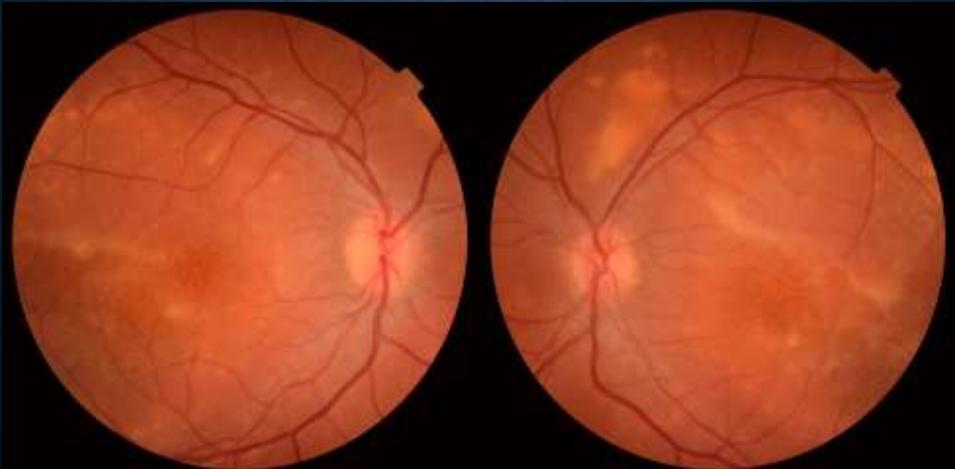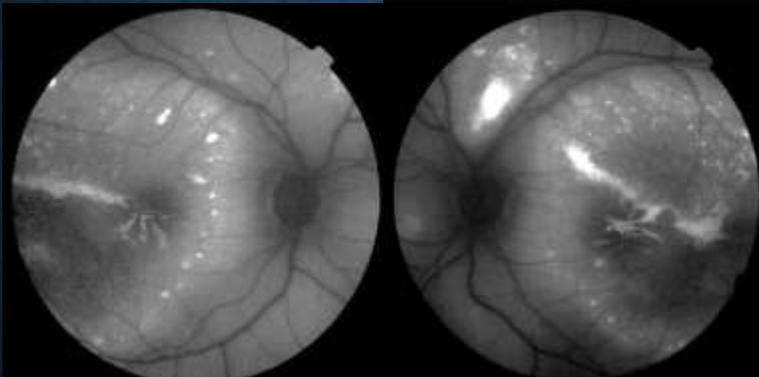
CASE 3 "Don't jump into conclusions"
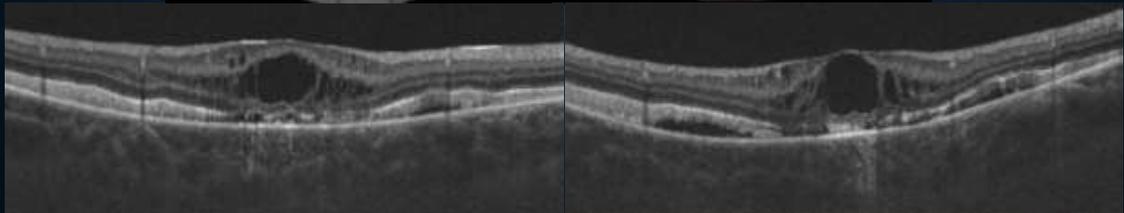26 y male
BCVA 0.4

CASE 3 "Don't jump into conclusions"
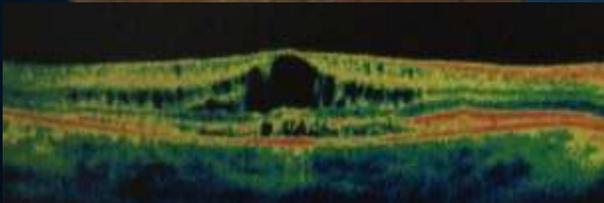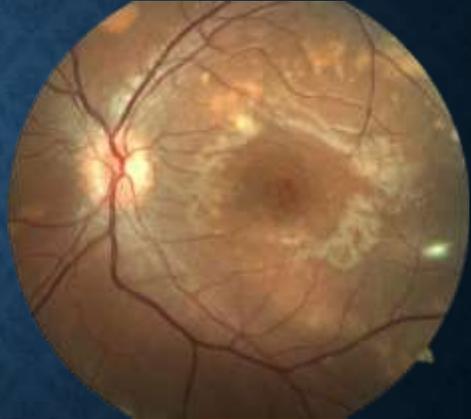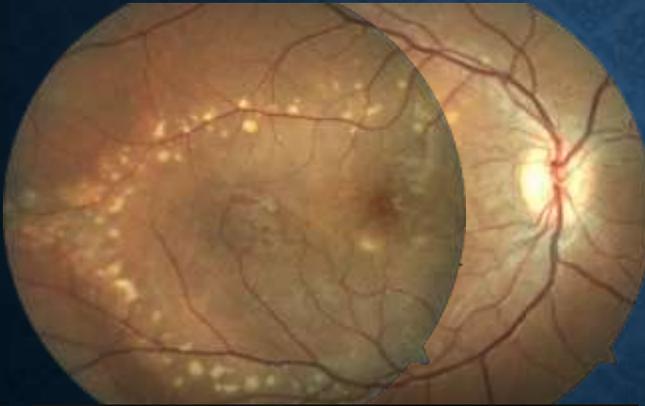26 y male
BCVA 0.4

Abnormal EOG prolonged dark adaptation time

CASE 3 "Don't jump into conclusions"
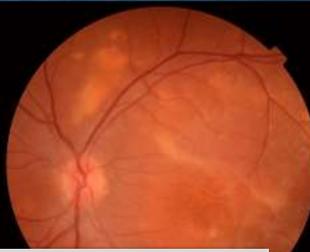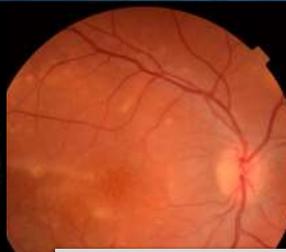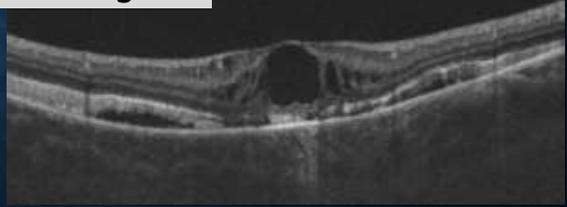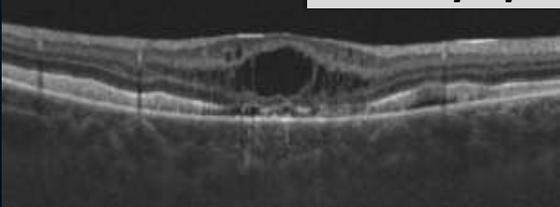
26 y male
BCVA 0.4

Back to 2012

CASE 3 "Don't jump into conclusions"

26 y male
BCVA 0.4

Abnormal EOG prolonged dark adaptation time

Heridetary Bestrophinopathy
Not every Cyst are leaking one

CASE 4 "How to spot a mimic"

57 y female with reading difficulties, BCVA 0.7 / 0.6

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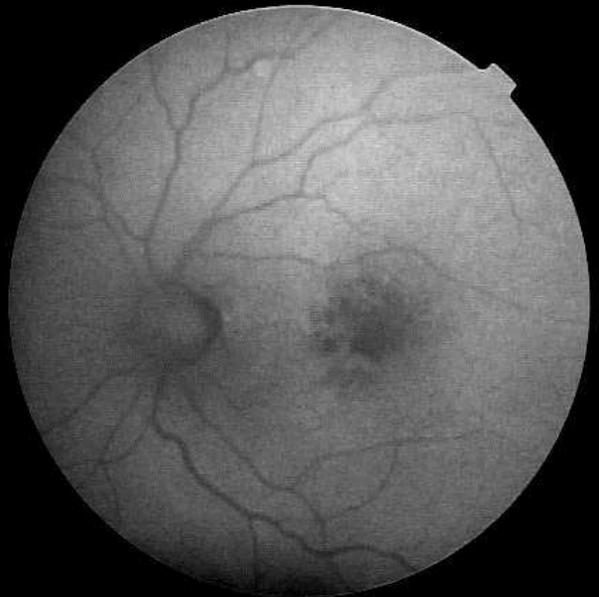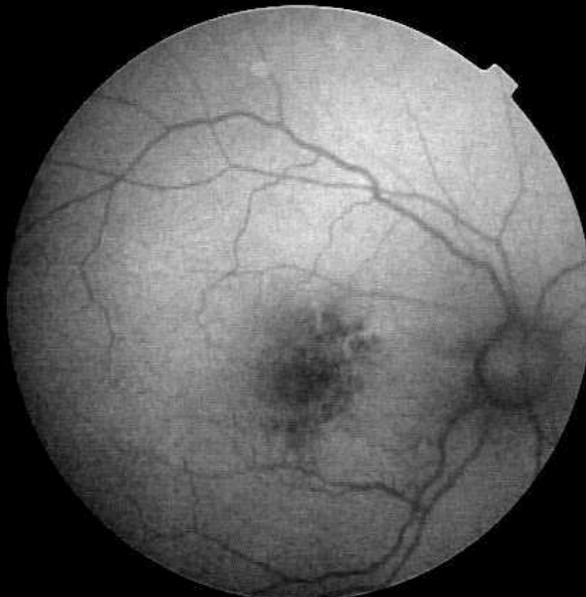

CASE 4 "How to spot a mimic" 57 y female with reading difficulties, BCVA 0.7 / 0.6

Old FFA one year older

CASE 4 "How to spot a mimic" 57 y female with reading difficulties, BCVA 0.7 / 0.3

2years later

Foveal Hge

CASE 4 "How to spot a mimic" 57 y female with reading difficulties, BCVA 0.7 / 0.3

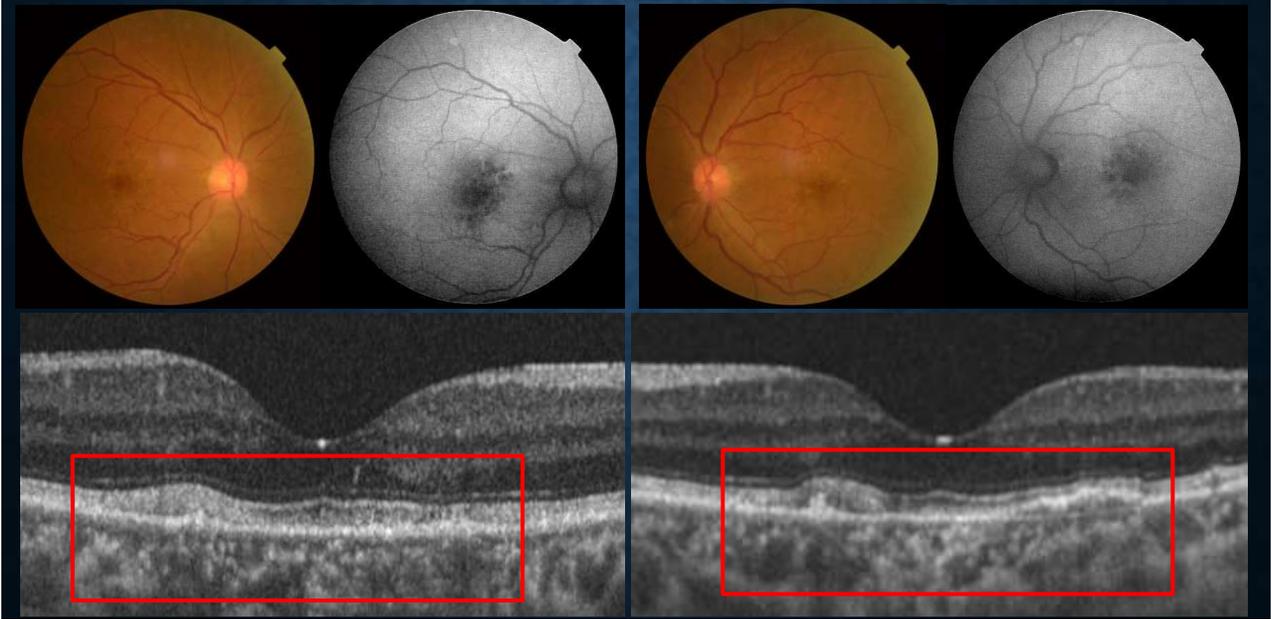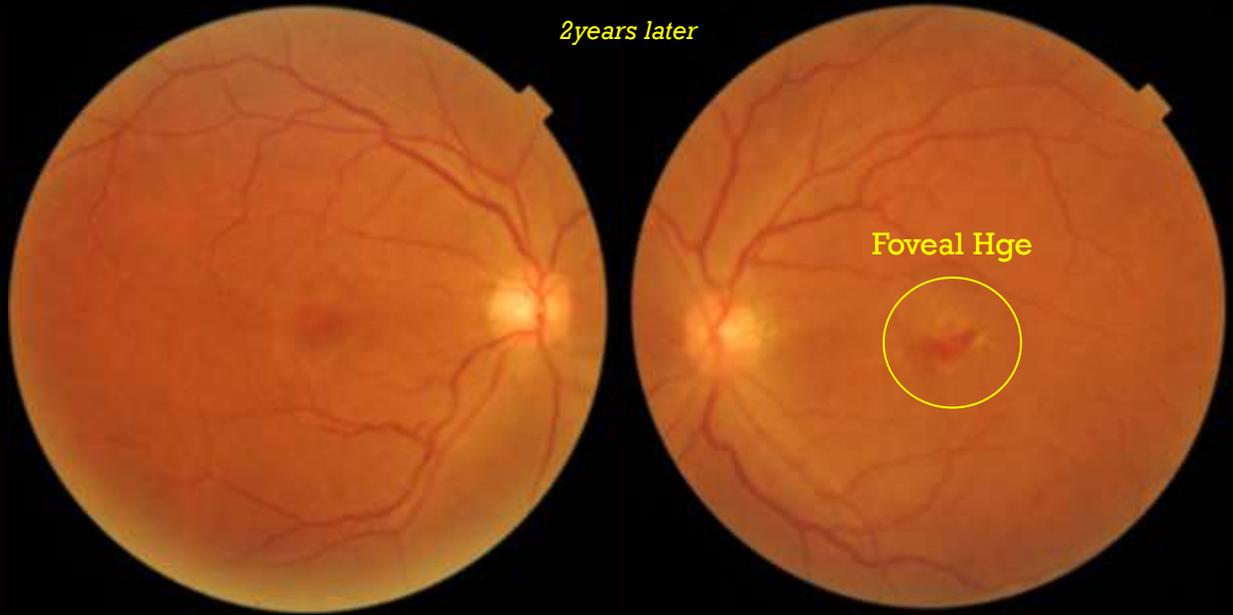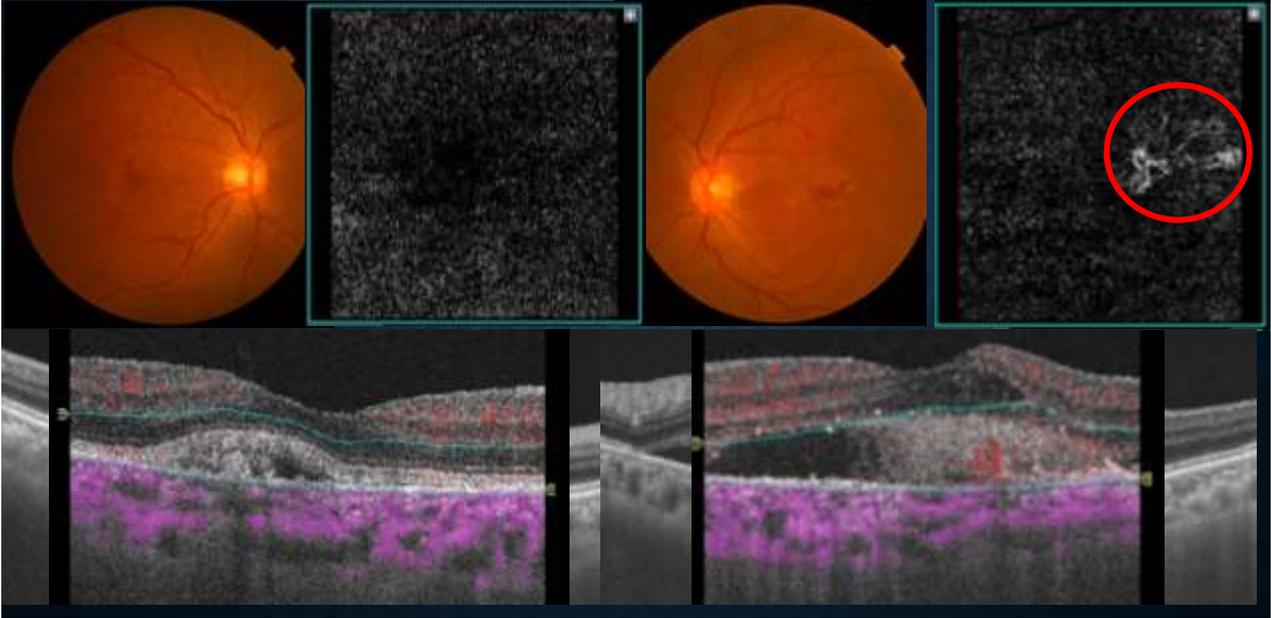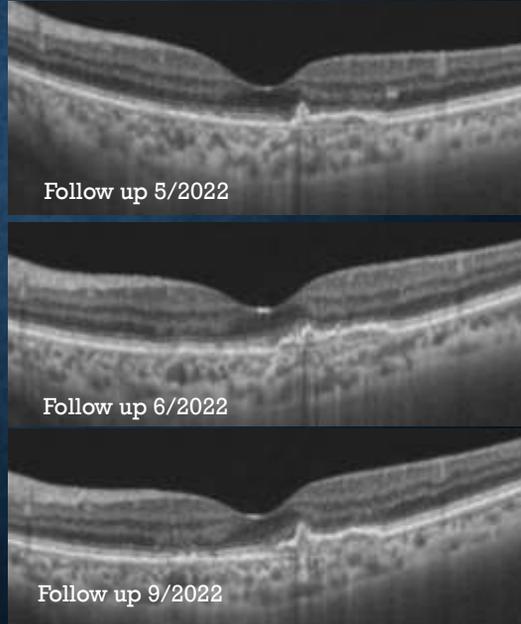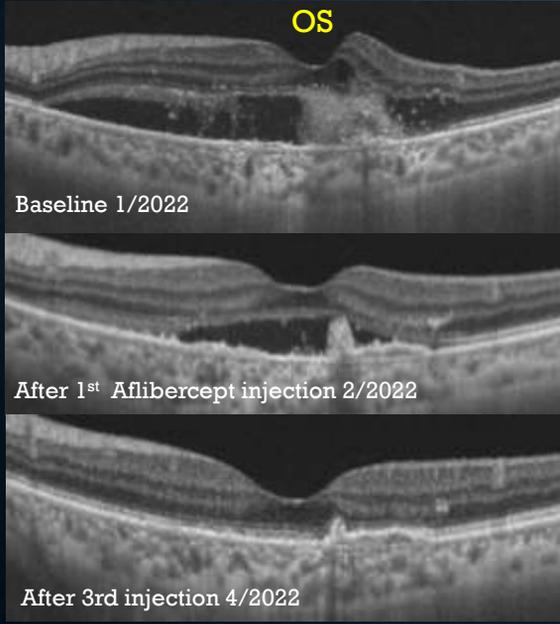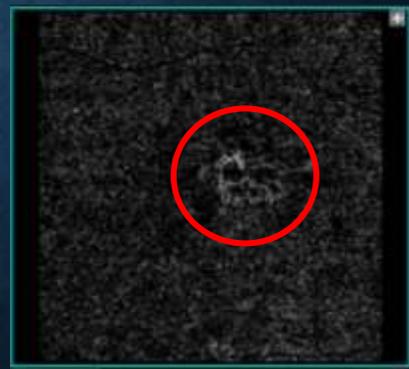**CASE 4 "How to spot a mimic"** 57 y female with reading difficulties, BCVA 0.7 / 0.3

OS

Baseline 1/2022

After 1st Aflibercept injection 2/2022

After 3rd injection 4/2022

Follow up 5/2022

Follow up 6/2022

Follow up 9/2022

CASE 4 "How to spot a mimic" 57 y female with reading difficulties, BCVA 0.7 / 0.3

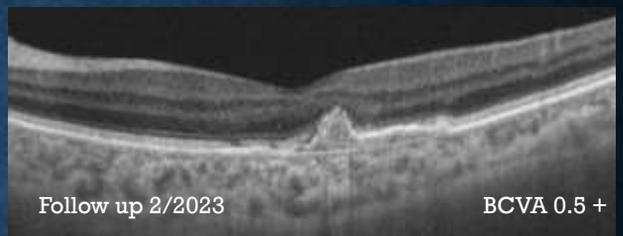OS

Baseline 1/2022   BCVA 0.3

Follow up 2/2023   BCVA 0.5 +

CASE 4 "How to spot a mimic" 57 y female with reading difficulties, BCVA 0.7 / 0.3

OD
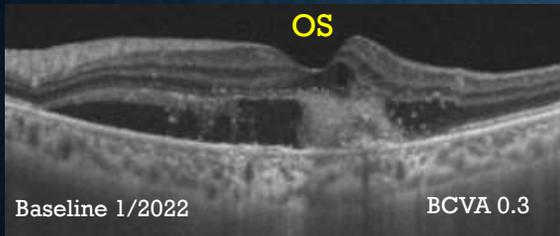
Avoid unnecessary injections by accurate Diagnosis of mimicking conditions

BCVA 0.7

TAKE HOME MESSAGE

"Decision Making"

   Accurate baseline diagnosis (plan course of ttt & evaluate prognosis)

"Optimizing Safety and therapeutic outcome"

   Individualization & Customization of ttt for each patient.

THANK YOU