

Ultrasensitive monitoring of geographic atrophy (GA) progression

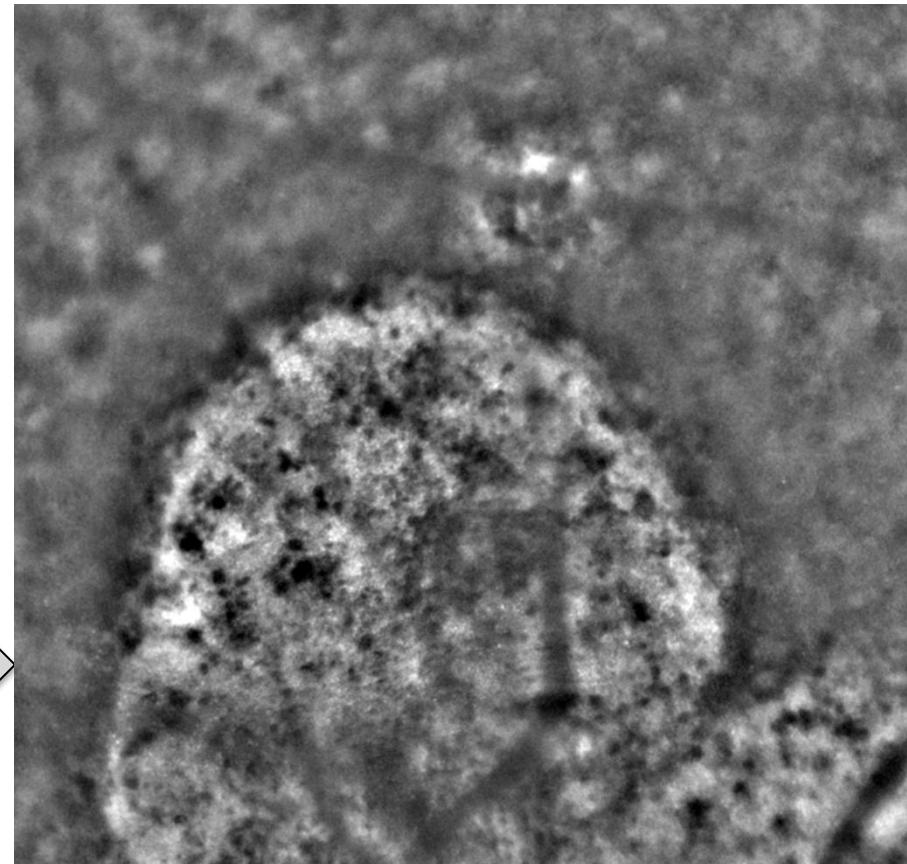
*K. Gocho, V. Sarda, S. Falah, J.-A. Sahel
M. Benchaboune, M. Ullern, and M. Paques
Clinical Investigation Center 503, INSERM, Quinze-Vingts National Eye Hospital, Paris, France*



Geographic atrophy: 5 months follow up

66 year old female patient with dry age related macular degeneration (AMD).

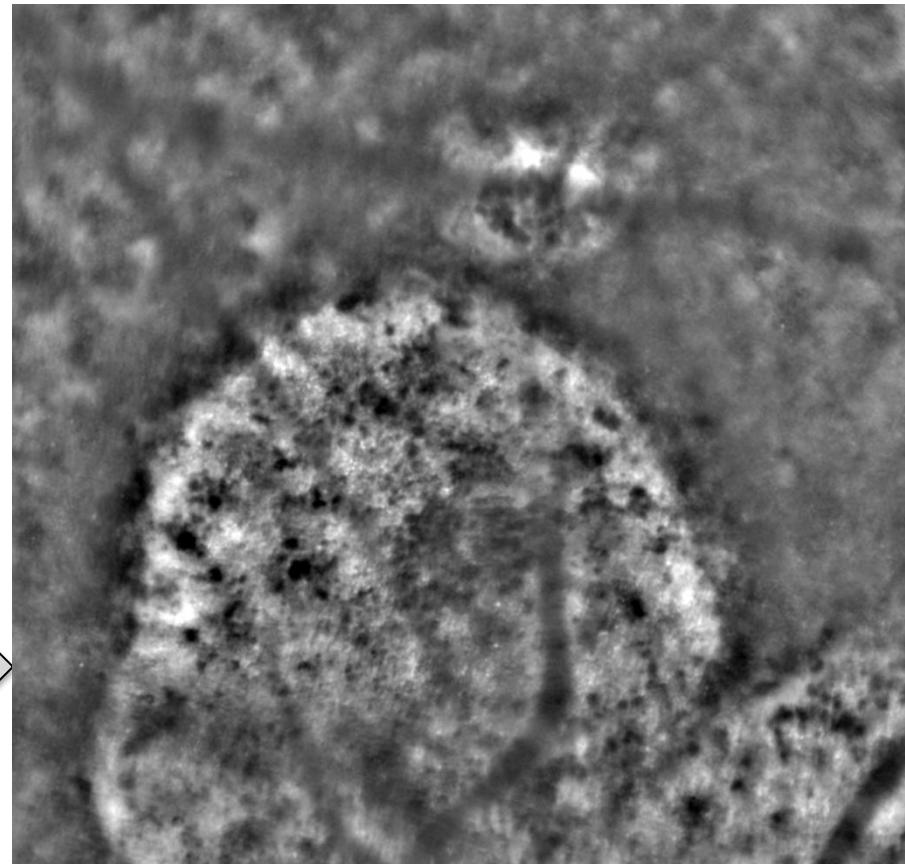
Adaptive optics (rtx1)
at T0



Geographic atrophy: 5 months follow up

66 year old female patient with dry AMD.

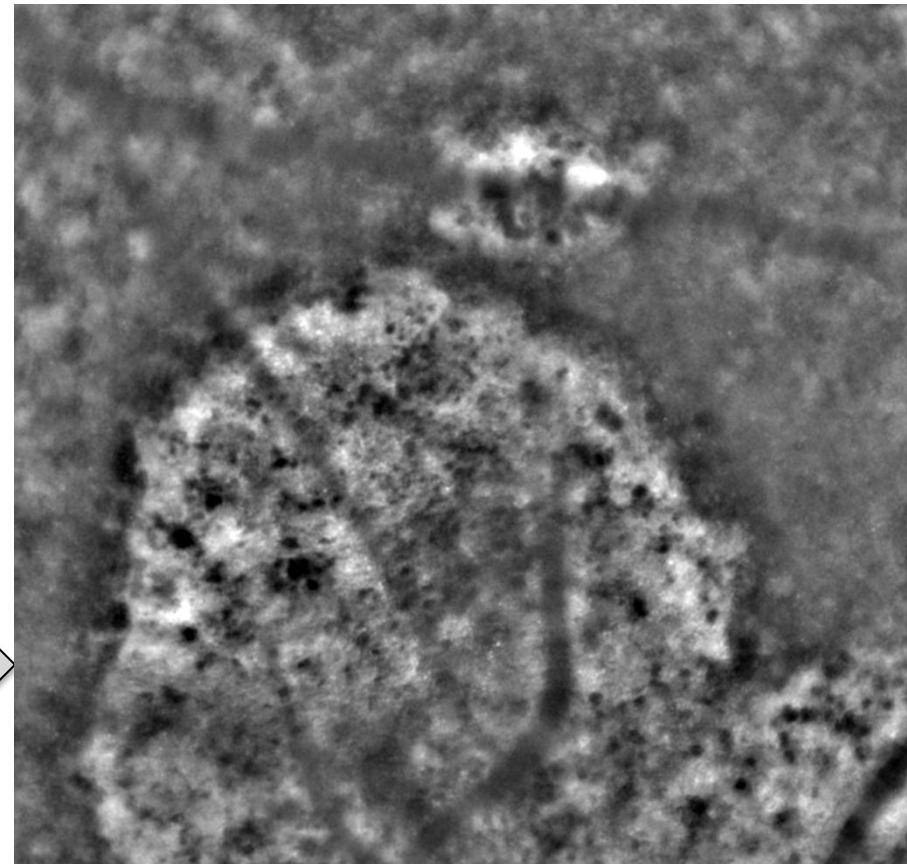
Adaptive optics (rtx1)
at T0 +
2 weeks



Geographic atrophy: 5 months follow up

66 year old female patient with dry AMD.

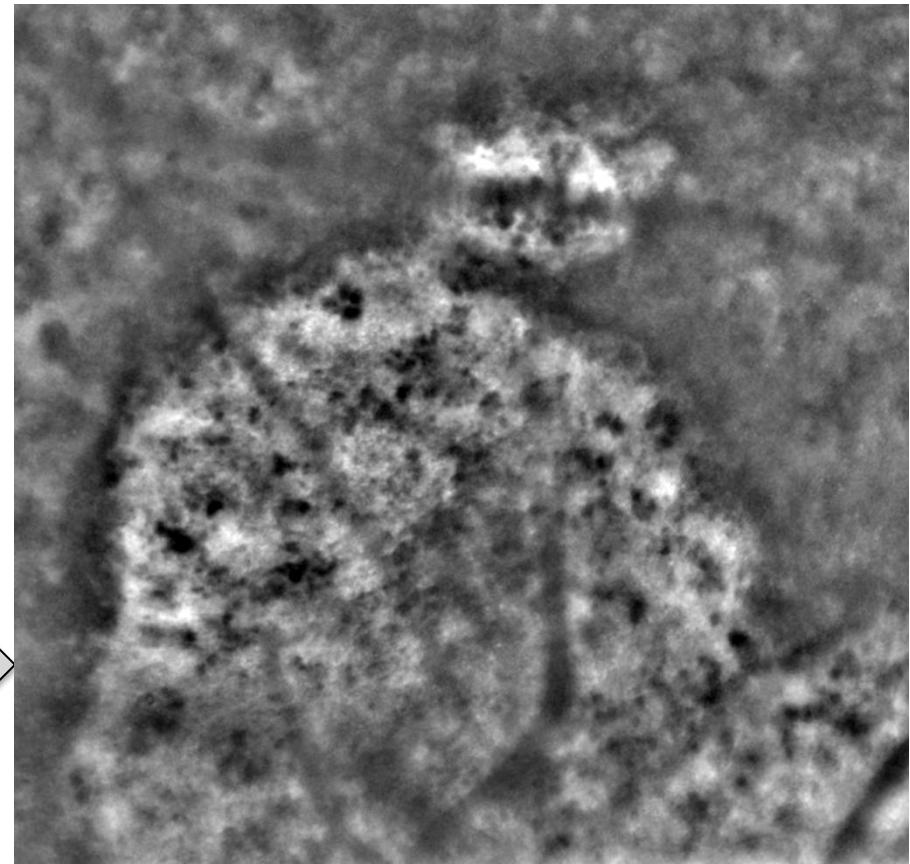
Adaptive optics (rtx1)
at T0 +
1 month



Geographic atrophy: 5 months follow up

66 year old female patient with dry AMD.

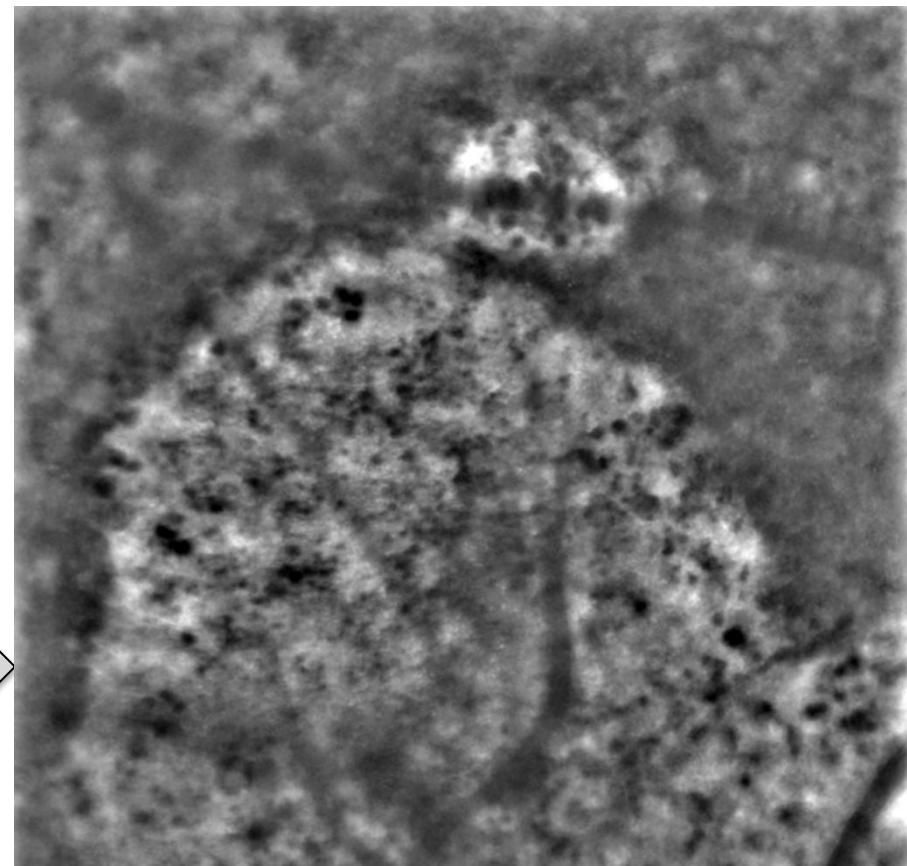
Adaptive optics (rtx1)
at T0 +
3 months



Geographic atrophy: 5 months follow up

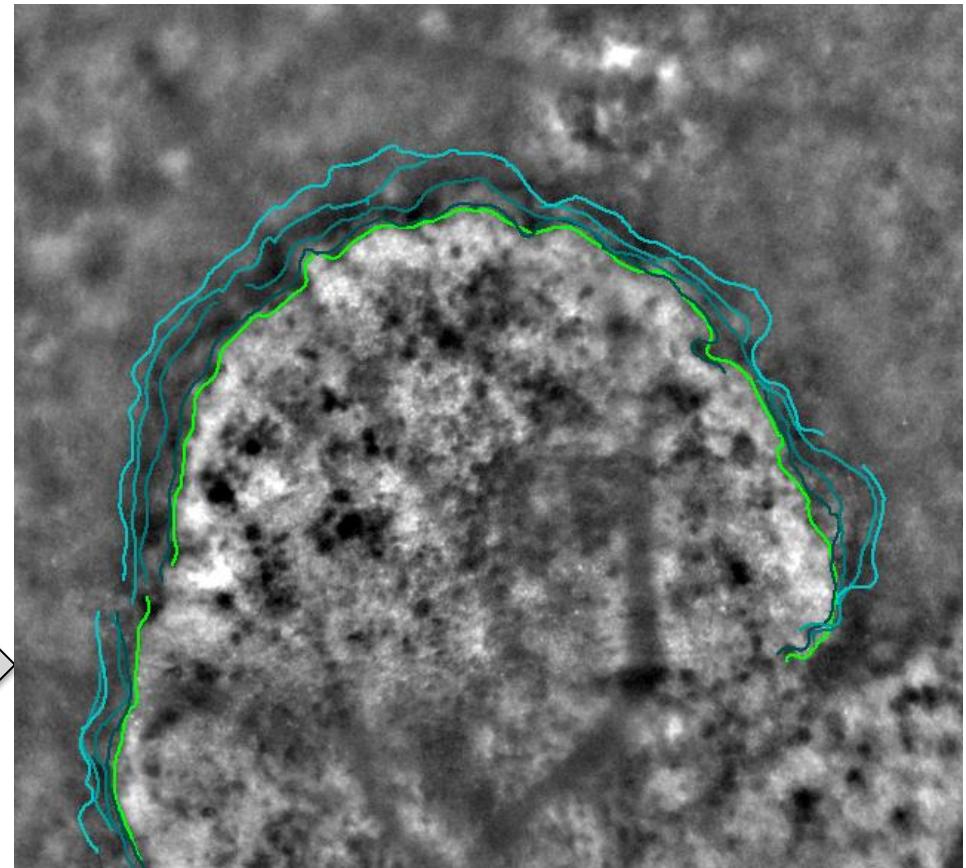
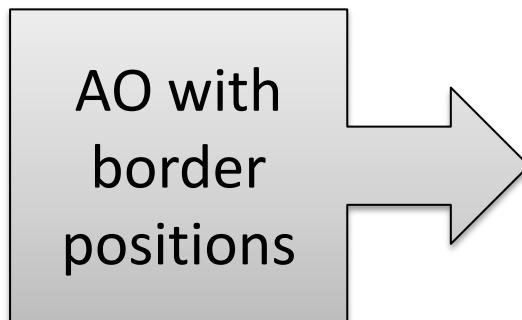
66 year old female
patient with dry AMD.

Adaptive
optics (rtx1)
at T0 +
5 months



Geographic atrophy: 5 months follow up

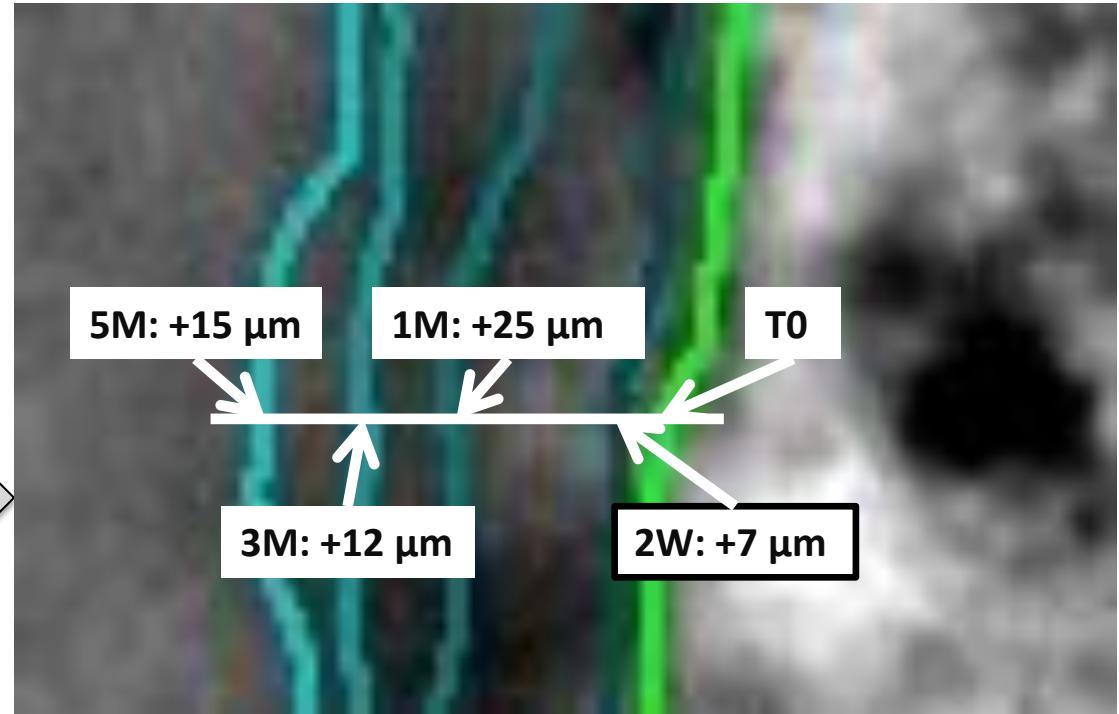
Successive border positions at each visit.



Geographic atrophy: 5 months follow up

Successive border
positions at each visit.

AO close-up
of border
positions



Conclusion

- Adaptive optics allows to detect the progression of atrophic lesions in as small time scale as a couple of weeks.
- Such small changes are not visible with conventional imaging techniques
- See also:
 - K. Gocho, V. Sarda, S. Falah, J.-A. Sahel, M. Benchaboune, M. Ullern, and M. Paques, "Adaptive optics imaging of geographic atrophy," *Investigative Ophthalmology & Visual Science*, Vol.54. May 2013.



imagine eyes