

Advantages of Strabismus

1. Reduce the "playing field"
 - Reduce the functional area of the visual field to which a patient diverts energy/attention
 - By suppression
 - By eso-deviation

Advantages of Strabismus

2. Reduces NOISE in the visual input:
 - Repositions/ suppresses the data originating from an eye with reduced clarity (noise)
 - By Suppression
 - By Anomalous Projection

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NP = Normal Projection

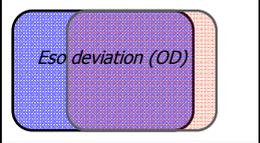
Advantages of Strabismus

3. Reduces conflict over the fusible retinal areas (i.e., **central & temporal retina**)
 - Nasal retina projects to temporal field: monocular visual processing area

Advantages of Strabismus

3. Reduces conflict over the fusible retinal areas (i.e., central retina & temporal retina)

- ▶ E.g., **Large angle** ETs separate temporal retina by increasing the turn, reducing potential for fusion.
 - ▶ Nasal retina projects to temporal field, which is the monocular visual processing area:
 - ▶ Brain can process info striking nasal retina OD simultaneously without trying to pair it with info coming from OS.
 - ▶ This is why patients with Esotropia often have trouble *relating* information between the two eyes; Information is processed in parallel, but not coordinated.

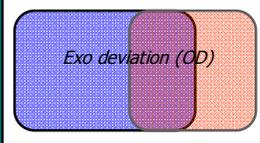
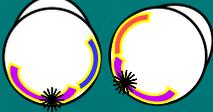



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Advantages of Strabismus

3. Reduces conflict over the fusible retinal areas (i.e., central retina & temporal retina)

- ▶ E.g., **Large angle** XTs ALSO separate temporal retina by increasing the turn.
 - ▶ Nasal retina projects to temporal field, which is the monocular visual processing area:
 - ▶ Brain can process info striking nasal retina OD simultaneously without trying to pair it with info coming from OS.
 - ▶ In the case of XT, some of these patients develop "panoramic viewing," and use information from both foveae.

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Advantages of Strabismus

4. When allowing big picture to take priority over details: lowers physiological stress

- "Let someone else work out the details"
- Exotropic tendency

5. When allowing details to take priority over big picture: ALSO lowers physiological stress

- Baby steps... (*...but to where?*)
- Esotropic tendency

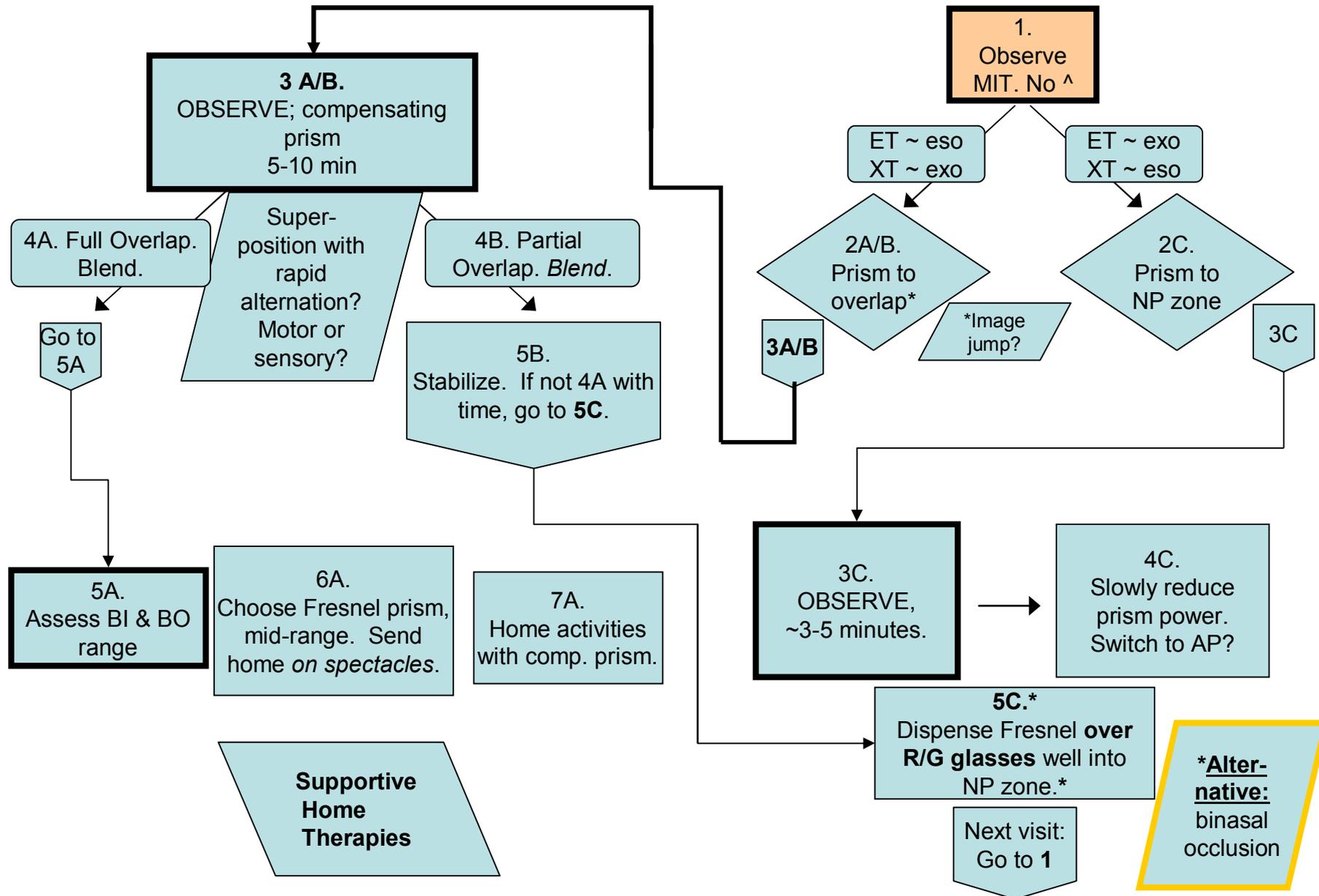
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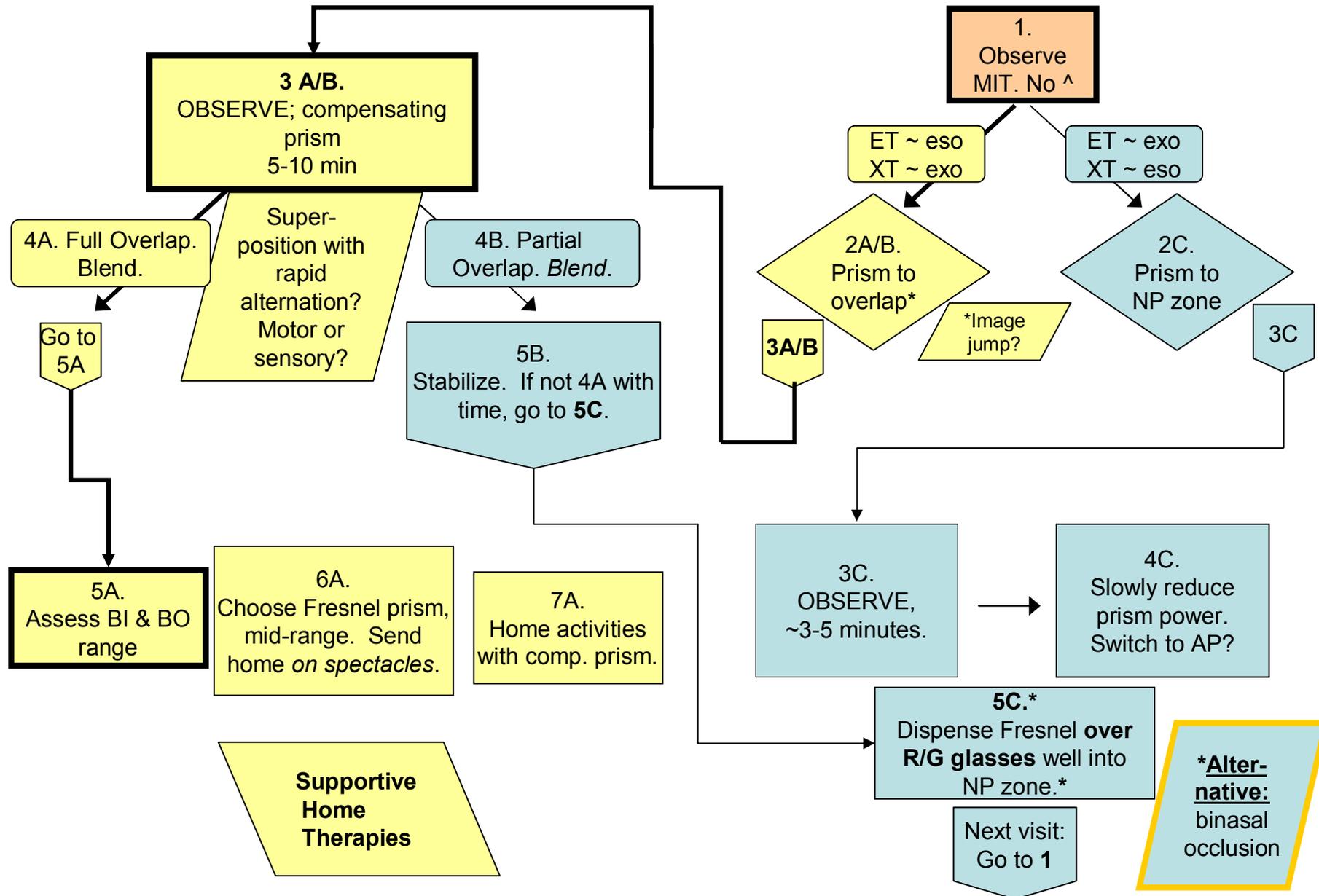
- ▶ When enabling driver/passenger system:
 - Suggests difficulty with teamwork;
 - Easier to have a single, clear leader.
 - Role assignment over an area of space, especially in **anisometropes**.
 - ▶ *Chicken & Egg!*
- ▶ These are indications of a generally stubborn personality type with a clear sense of what they wish to accomplish.
- ▶ Such people will need to be convinced *FROM THE INSIDE* of the advantages of an alternate (binocularly integrated, cooperative) mode of function.

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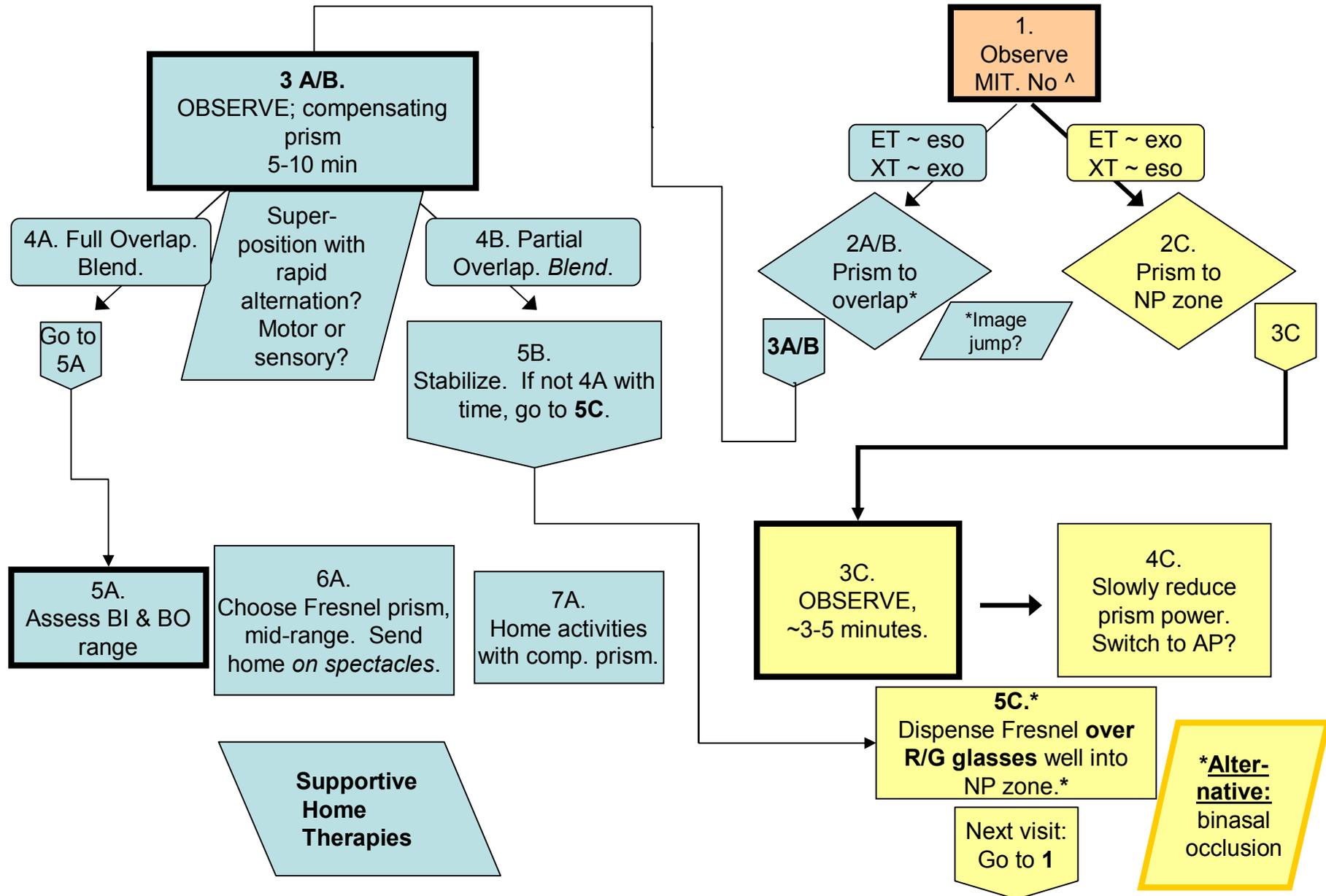
FLOW CHART, overview



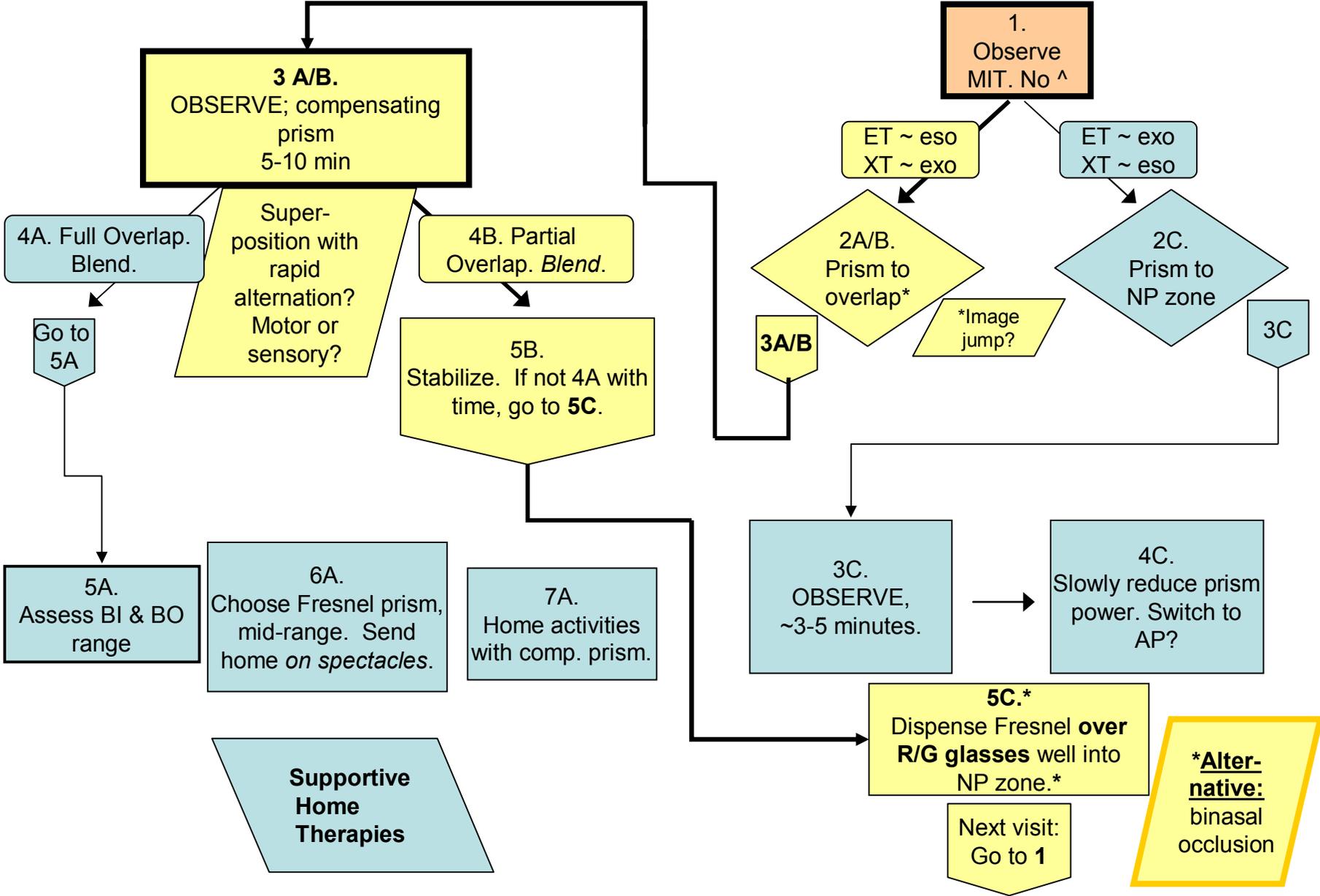
FLOW CHART, overview: A-track



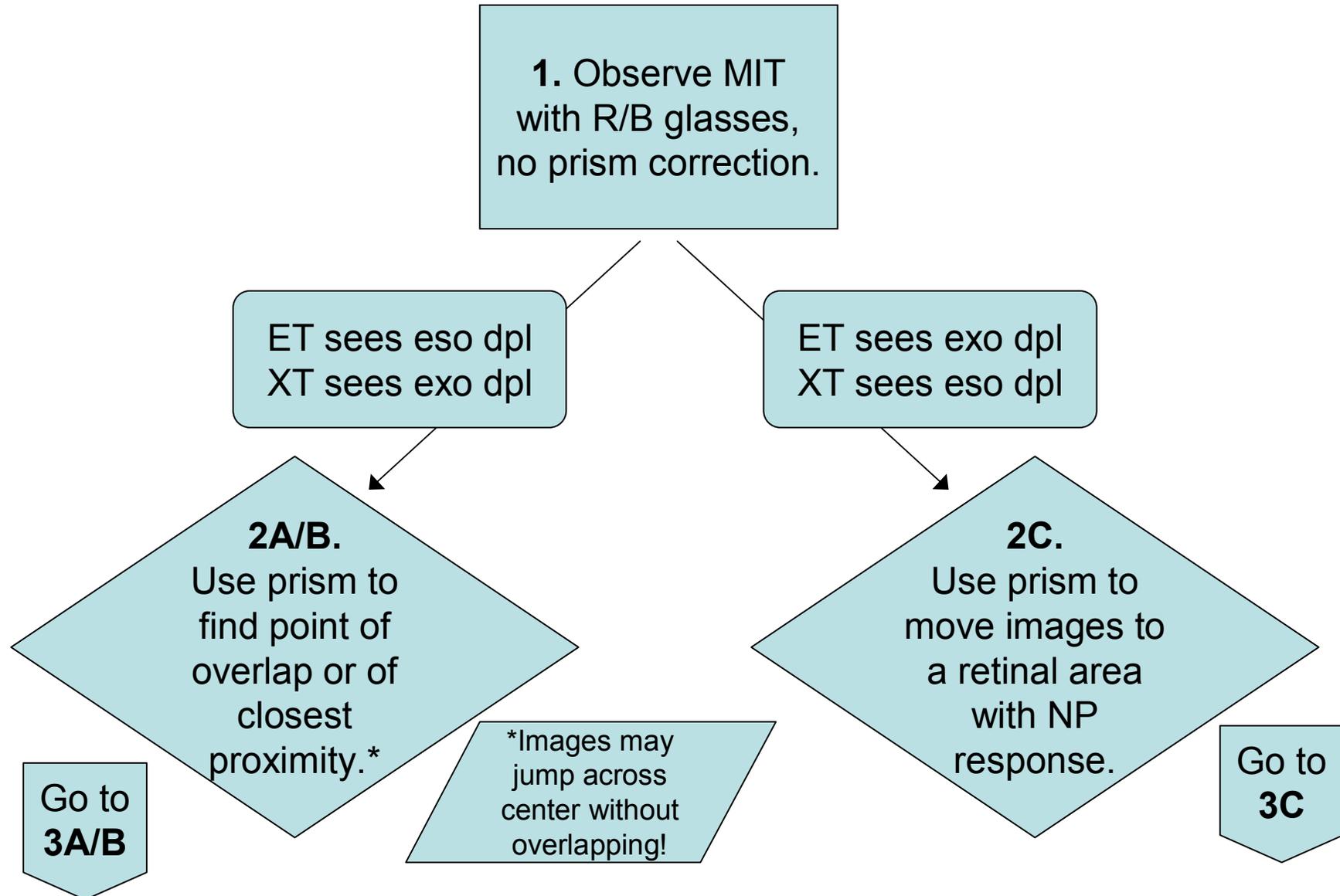
FLOW CHART, overview: C-track



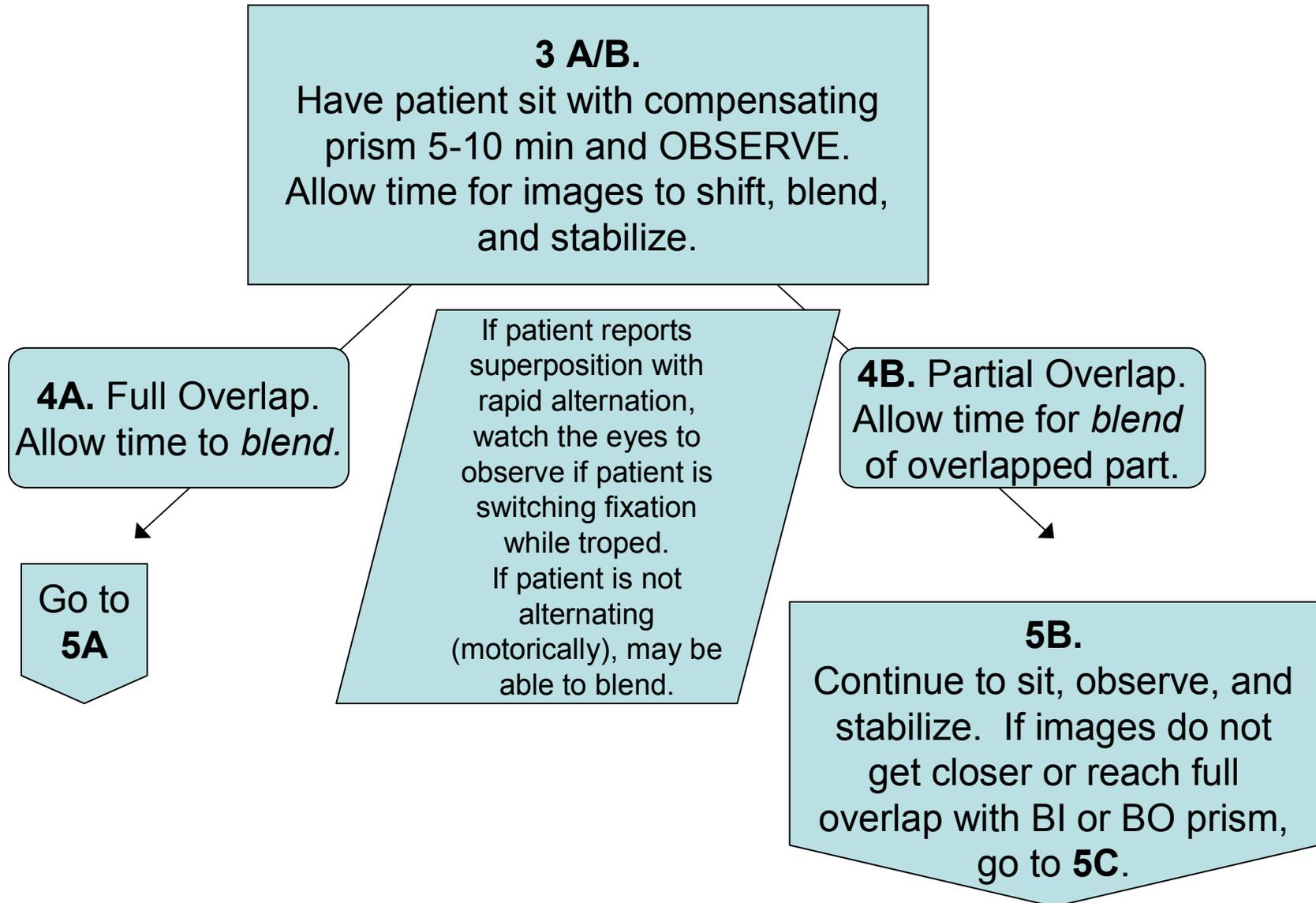
FLOW CHART, overview: B-track



FLOW CHART, Beginning



FLOW CHART, A/B Track



FLOW CHART, End, A-track

5A.

Assess the BI and BO range over which the patient can successfully blend images.

6A.

Choose a comfortable power of Fresnel prism, in the middle of the range. Send patient home with compensating prism *on spectacles*.

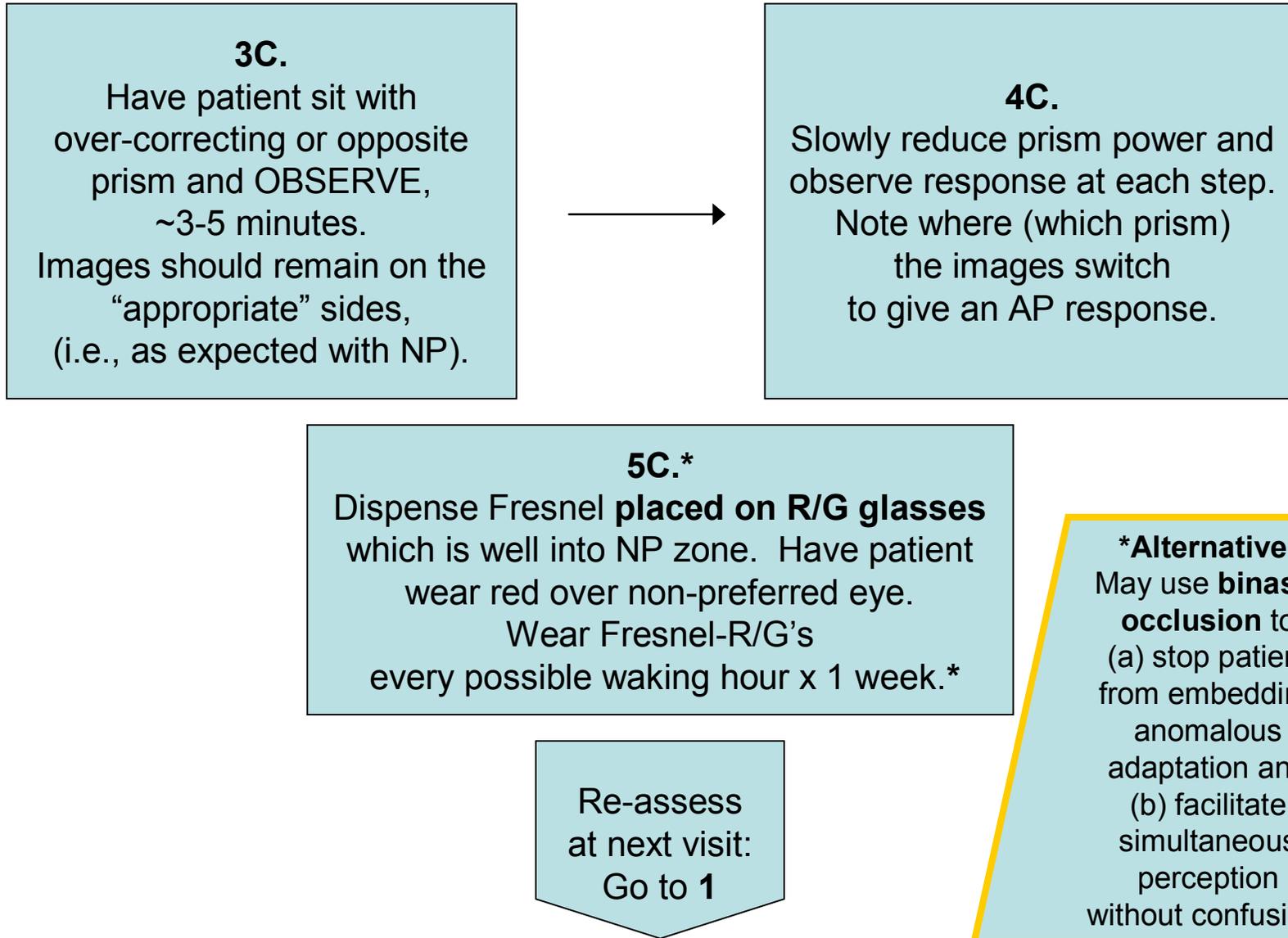
7A.

Home therapy with compensating prism: (Long term goal is to reduce the power of prism compensation over time.)

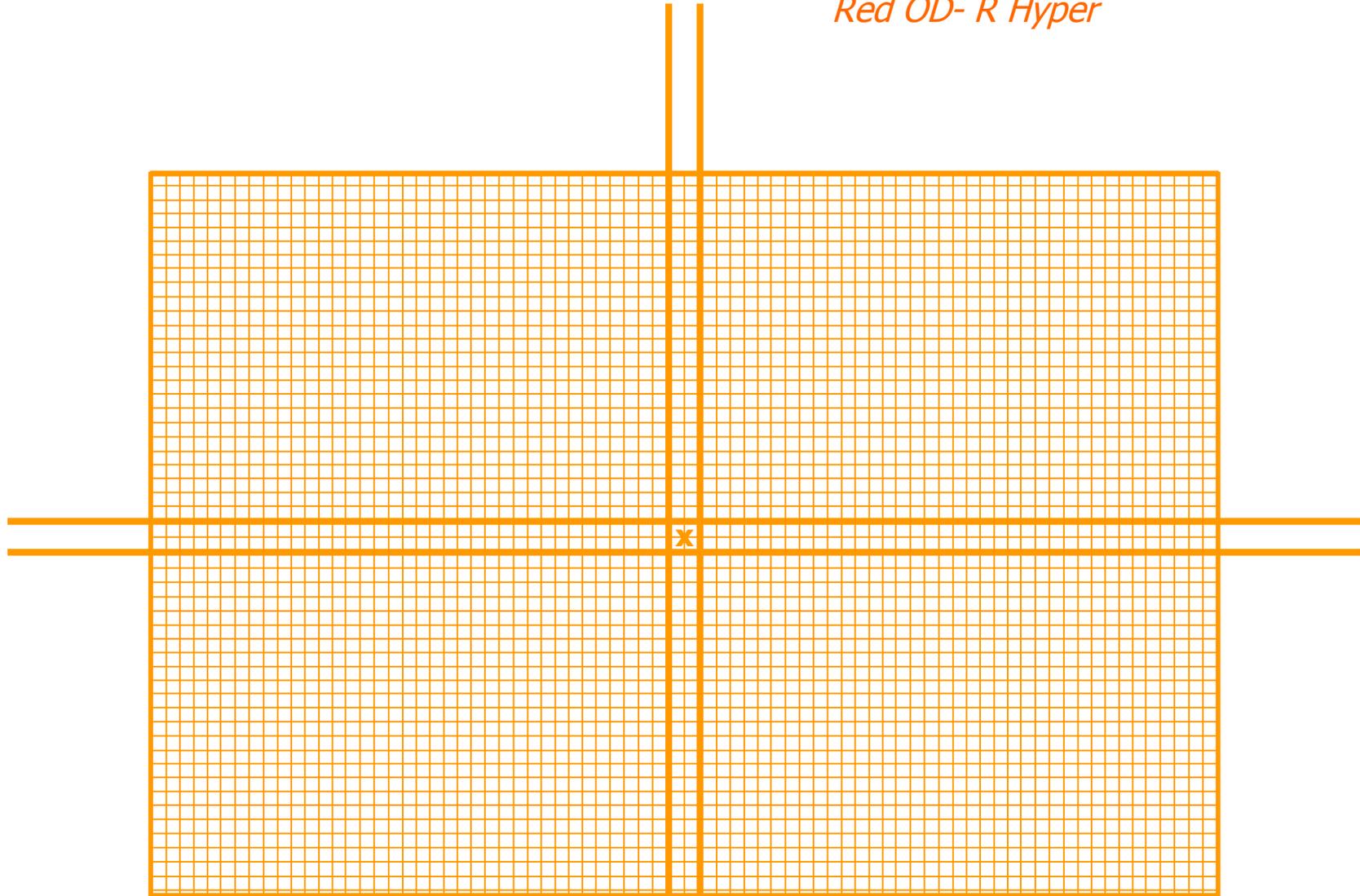
Home Therapies

- Wear Fresnels full time
- MIT/Swirl in powerpoint version
- Watch TV w/ R/G's (without TV filters)
- Eyeport (Lieberman) while wearing Fresnels
- Accommodative exercises
- Oculomotor activities (e.g., Nasal-to-temporal Hart Chart saccades for ET's)
- Vis-spatial org'z'n activities
- Peripheral Awareness activities

FLOW CHART, End, C-track



Red OD- R Hyper



Red OD- Eso
1 box = 0.5^ at 50 cm

Red OD- Exo

Red OD- L Hyper