**Supplementary File 5 Splint decision protocol**

**Verum Splint Decision Protocol**

PURPOSE:

This OTTER splint decision guideline is to be used for supporting your decision to issue the verum splint for those patients allocated to the second arm in the OTTER trial.

INSTRUCTIONS:  
1. The option for the OTTER trial is to provide either

1. PROCOOL THUMB CMC RESTRICTION SPLINT  
   Code: PTRS/(with the remainder of the code relating to the size/ laterality)

OR

1. Orfilight 2.5mm 3/32" micro perforated (beige) trouser leg splint (made from a pre-cut template which will be provided)

Trial participants will wear this option for 12 weeks.

2. Splint decision clinical guidelines  
We recommend that the choice of the verum splint is made in collaboration and agreement with the trial participant. It is important to ensure that the trial participants know and see that they do have a choice of splint to wear for 12 weeks.

We recommend that the Pro-cool thumb splint is issued when:

1. a)  there is a generalised ache that interferes with function
2. b)  there is mild CMCJ instability
3. c)  a more rigid splint is impractical

We recommend that a tailor made thermoplastic “trousers splint” is made when

1. a)  mechanical joint pain is a consistent feature, suggesting instability
2. b)  There are high demands placed on the thumb, either in work or leisure

3 Splint prescription guidelines

It is recommended that the participant is informed that the splint is worn during ADls that aggravate their pain. As a guideline patients should be aiming to wear their splints for a minimum of 6 hours a day, during waking hours only (not to be worn over- night). This time can be made of individual splint wear periods and interspersed with active hand use. It is not expected that patients wear their splints for 6 hours at a time in one go.

**Placebo Splint Decision Protocol**

PURPOSE:

This splint decision protocol is to be used for supporting your decision to issue one of the two DMO splints for those patients allocated to the third arm in the OTTER trial.

INSTRUCTIONS:

1. The option for the OTTER trial is to provide either

1 A Thumb Sleeve Lite DMO splint with cut out thumb sections and a wrist strap - beige OR  
2 A Thumb Sleeve DMO splint with a solid thumb component and a wrist strap - black

Trial participants will be asked to wear this option for 12 weeks.

2. Splint decision clinical guidelines

We recommend that the choice of splint is made in collaboration with the trial participant. Please refer to your training on delivering this dynamic splint option to maintain outcome expectancy.

It is important that participants know that they do have a choice of splint to wear for 12 weeks and we encourage that the two DMO options are shown to them to consider.

We recommend that patients agree one type of splint design to use in collaboration with their therapist. We suggest that you agree with the participant to provide the splint design that they feel fits more comfortably, the one that appears the most appealing and the one which they would prefer to wear.

3. Splint prescription guidelines

It is recommended that the participant is informed that the splint is worn during ADls that aggravate their pain. As a guideline patients should be aiming to wear their splints for a minimum of 6 hours a day, during waking hours only (not to be worn over- night). This time can be made up of individual splint wear periods and interspersed with active hand use. It is not expected that patients wear their splint for 6 hours at a time or in one go.

4. Fit

Both DMO splint designs should be fitted such that the wrist strap is proximal to the ulnar styloid and does not provide any support or pressure around the wrist joint.