From Old Age to Space Age Networks

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Honorary Senior Clinical Lecturer
Networks

DeNDRoN: Dementia & Neurodegenerative Diseases
Recruitment

Oxford Academic Health Science Network
Innovation
Reducing unwarranted variation
### NIHR ‘portfolio’ : new recruits with dementia
#### 2013-14 to date

<table>
<thead>
<tr>
<th>Study</th>
<th>ID</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain donation</td>
<td>BDR</td>
<td>50/87&lt;sup&gt;tv&lt;/sup&gt;/638&lt;sup&gt;cum&lt;/sup&gt;</td>
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<tr>
<td>Vision assessment</td>
<td>PROVIDE</td>
<td>50/106&lt;sup&gt;tv&lt;/sup&gt;/165&lt;sup&gt;cum&lt;/sup&gt;</td>
</tr>
<tr>
<td>Exercise in dementia - RCT</td>
<td>DAPA</td>
<td>52/90&lt;sup&gt;tv&lt;/sup&gt;</td>
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<tr>
<td>Stem cells</td>
<td>STEMBANCC</td>
<td>27</td>
</tr>
<tr>
<td>Assistive Technology – Qualitative</td>
<td>AKTIVE</td>
<td>2</td>
</tr>
<tr>
<td>Assistive Technology – RCT</td>
<td>ATILLA</td>
<td>14</td>
</tr>
<tr>
<td>Functional MRI - diagnostic</td>
<td></td>
<td>112</td>
</tr>
<tr>
<td>Training in person centred care – care home RCT</td>
<td>WHELD</td>
<td>324</td>
</tr>
<tr>
<td>Commercial, multicentre, drug RCT</td>
<td>SERVIER</td>
<td>9</td>
</tr>
<tr>
<td>Commercial, multicentre, drug RCT</td>
<td>MERCK EPOCH</td>
<td>5</td>
</tr>
<tr>
<td>Commercial, multicentre, drug RCT</td>
<td>TAU Rx</td>
<td>0</td>
</tr>
</tbody>
</table>

| **OXON + BUCKS TOTAL:** 656 | **OXON TOTAL (est):** 460 |

<sup>tv: TV total</sup>  <sup>cum: cumulative total all years</sup>
Other major clinical research

- Oxford Vascular Cognitive Impairment Cohort
  - 2000 patient subset of OXVASC
    - Incidence & risk factors following stroke / vascular
- Parkinson’s UK Discovery
- Healthy elderly
  - 800 civil servants followed for >25y
    - Cognitive reserve, structure & connections
  - Exercise and cognitive stimulation
    - Effect in healthy ageing
Performance against PM 10% target

- % diagnosed in Oxon
  - $\frac{460}{2,500} = 18.4\%$

- % Expected prevalence in Oxon
  - $\frac{460}{7,757} = 5.9\%$
‘Join Dementia Research’

• New national IT system in development
• Who is active on our ‘Research Interested Lists’?
  – Oxon, Dementia: 363
  – Oxon, Dementia, in current study: 87
Effect of Vitamin E and Memantine on Functional Decline in Alzheimer Disease
The TEAM-AD VA Cooperative Randomized Trial

Maurice W. Dykens, MD; Mary Sano, PhD; Sanjay Acharia, MD; Julia E. Vermeers, PharmD, BCNP; Manullikar D Padaki, MD; Maria Llontarte, MD; Susan Lowe, MA; Gerard E. Schellenberg, PhD; J. Riley McCarten, MD; Julie Malphurs, PhD; Susan A. Prieto, MD; Feijun Chen, MD, MPH, PhD; David J. Lored, MD; George Trapp, MD, JD; Rajib S. Baski, MD; Jacobo F. Mintz, MD; Judith L. Heidebrink, MD; Ana Vidal-Carmona, MD; Lilian M. Arroyo, MD; Angel R. Cruz, MD; Sally Zacharias, MD; Neil W. Kowall, MD; Mohit P. Chopra, MD; Suzanne Craft, PhD; Stephen Thielke, MD; Carolyn L. Turvey, PhD; Catherine Woodman, MD; Kimberly A. Monnell, MD; Kimberly Gordon, MSN, RN, FNP-BC; Julie Tomaska, PhD; Yoav Segal, MD, PhD; Peter N. Peduzzi, PhD; Peter D. Guzino, MPH, PhD


• No industry involvement
• Veterans with possible or probable AD
• mild to moderate severity
  – MMSE 12-26 inclusive
• Currently taking a ChEI eg Donepezil
Design

• Factorial ~N=150 in each arm
  • Vitamin E 1000iu bd
  • Memantine 10mg bd
  • Memantine 10mg bd + Vitamin E 1000iu bd
  • Placebo
• Vitamin E: DL-alpha-tocopheral acetate ‘synthetic
• Follow up 2.3 years
• Average age ~78y
• Mean MMSE 21
• 30% start within 12 weeks of starting ChEl
• Follow up 2.3 years
Outcomes

• Primary: Alzheimer’s Disease Cooperative Study-ADL
• Secondary
  – MMSE
  – ADASCog
  – Neuropsychiatry Inventory (Freq x Sev)
  – Caregiver Activity Survey
    • Time spent assisting in 6 ADL domains
  – Dependence Scale
    • 6 levels of functional dependence
Main result

• Compared with placebo
  – 3.15 ADCS points less decline on Vitamin E
  – 1.98 on memantine
  – 1.76 on both

• Delays progression by
  – 19% per year

• Comparable to ChEI eg Donepezil / Aricept

• Reduced caregiver time by 2 hours per day
A previous Vitamin E study

- Vit E (1,000iu bd) vs Selegiline (10mg od) vs both vs placebo
- 2 years
- N=341, (~85 in each group)
- Mean MMSE = 13
- Mean age = 73y
- Primary outcome: time to any of
  - Death
  - Institutionalisation
  - Loss of 2 of eating, grooming, toilet
  - Severe dementia

Vitamin E – useful evidence?

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Placebo</th>
<th>Vit E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unadjusted ‘survival’ (days)*</td>
<td>526</td>
<td>597</td>
</tr>
<tr>
<td>Adjusted ‘survival’ (days)*</td>
<td>440</td>
<td>670</td>
</tr>
<tr>
<td>Loss of ADL (%)</td>
<td>31</td>
<td>22</td>
</tr>
<tr>
<td>Severe dementia (%)</td>
<td>51</td>
<td>48</td>
</tr>
<tr>
<td>Institutionalisation (%)</td>
<td>39</td>
<td>26</td>
</tr>
<tr>
<td>Death (%)</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

* To composite endpoint
Of course I’ve taken my pills, darling
Cuprous Chloride ~10 µm
Magnesium ~10 µm
Wendy's Patch needs to be replaced.

Patch worn for 11 days.
Circle of Care
If only I’d known THAT
The online version of your personal child health record

Join the eRedbook trial!

If you are interested in participating in the trial and/or being kept up to date with the latest eRedbook developments, please let us know via our 'Contact' form.
BABy
NHS No. None entered
Age: 13 days
Gender: Unknown
Born: 05/03/2014
Calendar

Most Recent Weight: None entered
Photos of BABy

Summary & Appointments
Screening & Routine Reviews
Immunisations
Notes
Growth Charts & Firsts

Contacts
Use this space to save important clinical contacts.
You have not yet added any contacts. Add contacts

Add to health record
Add growth measurements
Add appointment

Next Appointment
There are no appointments scheduled in your eReabook.

Questions
You can keep track of any questions you may have here as a reminder for your next appointment with a health professional.

Add question
‘Jointly’
Carers UK
Circle of care
THANK YOU