CORRIGENDA

The title of this document should read:

"ANTI-hr' ANTI (c) INCOMPLETE BLOOD TYPING SERUM"
EXPERT COMMITTEE ON BIOLOGICAL STANDARDIZATION

Geneva, 3-9 November 1971

ANTI-HR/ANTI (C) INCOMPLETE BLOOD TYPING SERUM

from

WHO International Laboratory for Biological Standards,
National Institute for Medical Research,
Mill Hill, London

and

WHO International Blood Group Reference Laboratory,
London

1. Selection of bulk material

In 1966 contributions of serum obtained by Dr K. L. G. Goldsmith from a large number of
sources were selected for their specificity for this blood typing antibody at the WHO
International Blood Group Reference Laboratory. A total of some 880 ml of pooled high titre
serum was obtained and freeze-drying studies (WHO/BS/66.830) carried out to ascertain whether
this material was suitable and stable after it had been diluted (2:5 v/v) with inert AB serum
to a final volume of some two litres. These results were reported to the Nineteenth Expert
Committee.

2. Distribution into ampoules

In 1967 approximately two litres of frozen serum were received at the National Institute
for Medical Research, London. On thawing, the serum was found to be considerably turbid and
a considerable deposit removed by centrifugation at 10 000 rpm for 20 minutes at +2°C. The
serum was then passed through a series of millipore membranes ending with one with a mean
pore diameter of 0.45 μ. The total filtration time was five hours at room temperature; the
sterile serum was then stored at +4°C overnight.

Next morning the serum was distributed into sterile hand glass ampoules, coded 67/160.
The mean wet weight of every sixtieth ampoule was 0.516 mg ± 0.5 per cent. The ampoules were
placed on the freeze-drier shelves at -30°C and then transferred into liquid nitrogen before
being freeze-dried at -30°C. The ampoules were then fitted with plastic plugs to curtail
gaseous diffusion and dried to constant weight by secondary desiccation over P2O5 in a
vacuum, filled with dry nitrogen and sealed.

The ampoules were tested for leaks and have since been stored at -20°C in the dark.
Some ampoules have been stored at +4°C, +20°C, +37°C and +56°C for accelerated degradation
studies.

(a) Oxygen content of gas in ampoules = 0.46 per cent. (average of three ampoules range
0.12 to 0.67 per cent.)

(b) Dry weight of freeze-dried plug: 39 mg. (average of six ampoules; range 38.9 to
40.5 mg)

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résumé ni d'aucune citation sans l'autorisation de l'Organisation Mondiale de la Santé. Les opinions
exprimées dans les articles signés n'engagent
que leurs auteurs.
(c) Moisture content of freeze-dried plug: no moisture detected in any of 11 ampoules used.

3. Stability tests

This year the following haemagglutination titres were estimated in the Blood Group Reference Laboratory using individual dilutions with small dilution intervals.

<table>
<thead>
<tr>
<th>After 49 months at</th>
<th>In saline</th>
<th>With B1r cells</th>
<th>R1R2 cells</th>
<th>rr cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20</td>
<td>No reactions</td>
<td>200</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>+20</td>
<td>No reactions</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>+37</td>
<td>No reactions</td>
<td>60</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

This material is thus considered adequately stable and a collaborative study is planned by the Blood Group Reference Laboratory.