LCCPRP-1

**14C-Urea Capsules**

**(DIAGNOSTIC - FOR ORAL ADMINISTRATION)**

14C-Urea Capsules are used for assisting nuclear medicine practitioners to perform, interpret and report the results of 14C-urea breath test for the diagnosis of *Helicobacter pylori* infection. This test is based on the detection of the enzyme urease produced by *H. pylori*. Since urease is not present in normal human tissues, and since other urease-producing bacteria do not colonize the stomach, the presence of urease in the stomach can be equated with *H. pylori* infection.

**INDICATIONS**

- *H. pylori* infection and chronic gastritis is well established, also a small percentage of *H. pylori*-positive patients develop peptic ulcer disease (PUD), essentially all patients with duodenal ulcers and about 80% of patients with other than non-steroidal anti-inflammatory drug (NSAID)-induced gastric ulcers are infected with *H. pylori* and hence, eradication of *H. pylori* markedly reduces ulcer recurrence.

- To document *H. pylori* (Gram-negative spiral rod) eradication following anti-*H. pylori* therapy. Eradication should be confirmed no sooner than 1 month, and preferably longer, after completion of therapy.

**Description**: Gelatin capsules containing 14C-urea capsules

**Radioactive contents**: 1 μCi/capsule

**Radionuclidic purity**: No other extraneous radionuclide is present

**Radiochemical purity**: >95%

**Storage**: Store below 30°C with a silica gel bag

**Shelf life**: 6 months from the reference date

**Availability**: Ex-stock

**Dosage and administration**: Administer orally, by swallowing the capsule with water

**Available pack sizes**: Pack of 2 and 5 capsules
Physical characteristics of $^{14}$C

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half life</td>
<td>5730 y</td>
<td></td>
</tr>
<tr>
<td>Decay mode</td>
<td>$\beta^-$</td>
<td></td>
</tr>
<tr>
<td>$E_p$ (max) &amp; $E_p$ (Mean)</td>
<td>156 keV (max); 49 keV (mean)</td>
<td></td>
</tr>
</tbody>
</table>

How $^{14}$C-urea capsule works?

14C-urea Capsules Production Facility

Oral Administration of Capsules

For placing the orders and further details please contact
Customer Support Services Cell (CSSC)
Board of Radiation and Isotope Technology
V.N.Purav Marg, Mumbai-400 094
Tel: (022) 2556 9806, 2551 2993, 2557 3534, 2556 5535 ● Fax: (022) 2556 2161, 2558 1319
E-mail:sales@britatom.com ● Website : www.britatom.com