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The first-line treatment of *Helicobacter pylori* infection in Piedmont in the year 2017

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*Conflicts of interest.*—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

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We thank Dr Berrutti and Dr Leone who in their letter\textsuperscript{1}, inspired from an updated review\textsuperscript{2} opened a crucial issue regarding the optimal treatment, in the year 2017, of \textit{Helicobacter pylori (H. pylori)} infection in Piedmont, Northern Italy. The recent Maastricht V/Florence Consensus Report of the European Helicobacter and Microbiota Study Group has recommended a threshold of 15\% to define Countries with low and high clarithromycin-resistance rates.\textsuperscript{3} In Countries with high clarithromycin-resistance rates, the bismuth-containing quadruple therapy (with proton pump inhibitor [PPI], metronidazole and tetracycline) is the first recommended choice of treatment.\textsuperscript{3}

In Piedmont, studies conducted in the last 5 years have shown that clarithromycin-based treatments achieved an eradication rate of about 70\%.\textsuperscript{4-6} Treatments based on other macrolides did not obtain better results.\textsuperscript{7} Nevertheless, as reported by Dr Berrutti and Dr Leone, alternative treatments did not obtain better outcomes.\textsuperscript{8} Considering the issue of bacterial resistance at a microbiological level, we have participated to a multicentric European study revealing that, in Italy, the primary rate of \textit{H. pylori} clarithromycin resistance was 26.7\%.\textsuperscript{9} In Piedmont, the results were not different. Hence, all these data suggested that in this region, clarithromycin-based treatments should not be routinely prescribed. Less critical is the situation regarding metronidazole, because in contrast to clarithromycin and levofloxacin resistance, the impact of metronidazole resistance on \textit{H. pylori} eradication is limited and can be overcome by increasing the length of treatment or by prescription of bismuth-containing quadruple therapy including metronidazole.\textsuperscript{2}

In conclusion, presently, in Piedmont the first-line treatment for \textit{H. pylori} infection should be the bismuth-containing quadruple therapy.

\textbf{References}


