

samatasvir, and these drugs target one of the nonstructural proteins of HCV, that is, **NS5A**. The drug sofosbuvir targets the nonstructural protein **NS5B** (27,28). The term “nonstructural” means that the protein is not part of the infective viral particle and that, instead, it is used to mediate maturation or assembly of the viral particle inside of the host cell.

A variety of drugs have been used in clinical trials on HCV, as indicated:

- peginterferon-alfa-2 (29,30,31,32),
- sofosbuvir (33,34,35,36),
- ledipasvir (37,38),
- boceprevir (39,40),
- telaprevir (41),

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<sup>30</sup>Lok AS, Gardiner, DF, Lawitz E, et al. Preliminary study of two antiviral agents for hepatitis C genotype 1. *New Engl. J. Med.* 2012;366:216–24.

<sup>31</sup>Bacon BR, Gordon SC, Lawitz E, et al. Boceprevir for previously treated chronic HCV genotype 1 infection. *New Engl. J. Med.* 2011;364:1207–17.

<sup>32</sup>Poordad F, McCone J, Bacon BR, et al. Boceprevir for untreated chronic HCV genotype 1 infection. *New Engl. J. Med.* 2011;364:1195–206.

<sup>33</sup>Lawitz E, Mangia A, Wyles D, et al. Sofosbuvir for previously untreated chronic hepatitis C infection. *New Engl. J. Med.* 369:1878–87.

<sup>34</sup>Kowdley KV, Gordon SC, Reddy KR, et al. Ledipasvir and sofosbuvir for 8 or 12 weeks for chronic HCV without cirrhosis. *New Engl. J. Med.* 2014;370:1879–88.

<sup>35</sup>Gane EJ, et al. Nucleotide polymerase inhibitor sofosbuvir plus ribavirin for hepatitis C. *New Engl. J. Med.* 2013;368:34–44.

<sup>36</sup>Afdhal N, Zeuzem S, Kwo P, et al. Ledipasvir and sofosbuvir for untreated HCV genotype 1 infection. *New Engl. J. Med.* 2014;370:1889–98.

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<sup>38</sup>Afdhal N, Zeuzem S, Kwo P, et al. Ledipasvir and sofosbuvir for untreated HCV genotype 1 infection. *New Engl. J. Med.* 2014;370:1889–98.

<sup>39</sup>Bacon BR, Gordon SC, Lawitz E, et al. Boceprevir for previously treated chronic HCV genotype 1 infection. *New Engl. J. Med.* 2011;364:1207–17.

<sup>40</sup>Poordad F, McCone J, Bacon BR, et al. Boceprevir for untreated chronic HCV genotype 1 infection. *New Engl. J. Med.* 2011;364:1195–206.

<sup>41</sup>Jacobson IM, McHutchison JG, Dusheiko G, et al. Telaprevir for previously untreated chronic hepatitis C virus infection. *New Engl. J. Med.* 2011;364:2405–16.