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HIV Treatment with Once-Daily Single Tablet Regimens

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Treatment for HIV infections requires lifelong antiretroviral therapy. Patient compliance with treatment is therefore very important in the context of effective viral suppression and avoiding the development of drug resistance. Until the last decade, there was a lack of efficient single tablet regimens (STRs). There are two currently approved regimens for fixed-dose STRs, Atripla and Complera. Most recently, elvitegravir/cobicistat/emtricitabine/tenofovir (QUAD, Stribild) has been approved by the U.S. Food and Drug Administration (FDA). Phase 2 and 3 clinical trials are also taking place for two other SRTs, darunavir/cobicistat/emtricitabine/GS-7340 and abacavir/lamivudine/dolutegravir. Another drug, the 572-Trii pill (Shionogi-ViiV Healthcare, LLC), is also undergoing late-phase clinical trials [1,2].

We generally prescribe efavirenz+emtricitabine+tenofovir disoproxil fumarate or ritonavir boosted lopinavir+emtricitabine+tenofovir disoproxil fumarate for most of our patients. Although both these regimens are good choices in terms of efficacy, we encounter some compliance problems due to drug side-effects. Central nervous system problems and metabolic disorders are the major problems related to the use of efavirenz and ritonavir boosted lopinavir, respectively. There are various groups of drugs whose entry into use is keenly anticipated in Turkey. Quad heads the list of these, being a combined preparation that permits effective retroviral therapy by itself in a single daily dose. This is because Quad contains molecules with different functional mechanisms. HIV-1 integrase and reverse transcriptase are the main targets of the drug. These are inhibited by elvitegravir boosted by the pharmaco-enhancer cobicistat and the two nucleoside reverse transcriptase inhibitors emtricitabine+tenofovir disoproxil fumarate [2]. In two randomized phase trials recently published in the Lancet, Quad was compared with ritonavir boosted atazanavir+emtricitabine+tenofovir disoproxil fumarate and efa virenz+emtricitabine+tenofovir disoproxil fumarate regimens in naive patients. These concluded that Quad was not inferior to the comparative agents. Discontinuation of treatment due to adverse events was similar to that of the other regimens in both trials, and the side-effects reported were also comparable [3,4].

We therefore think that combined preparations permitting once-daily use are a preferable treatment option and encouraging in terms of raising patient compliance to the highest level and minimizing drug side-effects.

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