We investigate the interplay between the strong correlation and the spin-orbital coupling in the Kane-Mele-Hubbard model and obtain the qualitative phase diagram via the variational cluster approach. We identify, through an increase of the Hubbard $U$, the transition from the topological band insulator (TBI) to either the spin liquid phase or the easy-plane antiferromagnetic (AF) insulating phase, depending on the strength of the spin-orbit coupling. Starting from TBI, the spin-orbit coupling gap $\Delta_{SO}$ closes first and then the Mott gap opens up but without the gapless edge states for increasing $U$, which is closely related to the topological properties of the system. The closing process of $\Delta_{SO}$ driven by the correlations is accompanying with a splitting of both the conduction and valence bands. In the strong spin-orbit coupling regime, the state transiting from TBI is the easy-plane AF Mott insulator. In the weak coupling regime, a spin liquid phase emerges between the TBI and the AF Mott insulators.¹