Strong solutions of a neutral type equation with finite delay

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© 2019, Springer Nature Switzerland AG. This paper is concerned to study the existence and uniqueness of solution of neutral type differential equations, by using the maximal regularity property of the first-order abstract Cauchy problem with finite delay on Lebesgue spaces defined at the line. The main tools that we use to achieve our goals are an operator-valued version of Miklhin?s Fourier multiplier theorem, weighted Sobolev spaces on the real line and fixed point arguments.