ACHIEVE LIFE SCIENCES, INC.

1040 West Georgia Street, Suite 1030 Vancouver, British Columbia, V6E 4H1

December 17, 2019

VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attn: Gregory Dundas

Re: Achieve Life Sciences, Inc. Registration Statement on Form S-1 (File No. 333-234530) originally filed November 6, 2019, as amended.

Requested Date: December 17, 2019 Requested Time: 12 PM Eastern Time

Ladies and Gentlemen:

Achieve Life Sciences, Inc. (the "Registrant") hereby requests that the Securities and Exchange Commission (the "Commission") take appropriate action to make the above-captioned Registration Statement on Form S-1 effective at the "Requested Date" and "Requested Time" set forth above or as soon thereafter as practicable.

The Registrant hereby authorizes Alan Smith and Chelsea Anderson, both of whom are attorneys with the Registrant's outside legal counsel, Fenwick & West LLP, to orally modify or withdraw this request for acceleration.

The Registrant requests that it be notified of such effectiveness by a telephone call to Ms. Anderson at (206)389-4516 or, in her absence, Mr. Smith at (206) 389-4530.

Sincerely,

ACHIEVE LIFE SCIENCES, INC.

By: /s/ John Bencich

John Bencich Chief Financial Officer

cc: Richard Stewart, Chairman and Chief Executive Officer Achieve Life Sciences, Inc.

Alan C. Smith Chelsea Anderson Fenwick & West LLP

[Signature Page to Company Acceleration Request Letter]