POS6 Med-4: A COMPARISON OF THE CRAVING PROFILE OF A NOVEL NICOTINE REPLACEMENT THERAPY VS NICOTINE PATCH DURING THE FIRST TWO WEEKS OF A QUIT ATTEMPT: A NON-INFERIORITY STUDY

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Introduction:

• Smokers report that craving is a key barrier to cessation
• As such, one evaluation of novel treatments is whether they can attenuate the craving experienced during quitting
• The Chrono Quit Smoking Solution (CQSS2) is a wearable drug delivery product that transdermally delivers metered pulses of nicotine (~21 mg daily)
• Here we report the results from a Phase 2, two-arm, open-label non-inferiority study designed to assess the craving profile of the CQSS2 vs nicotine patch (21mg/24-hrs) during the first two weeks of a quit attempt

Method:

• Interested quitters (n=85) were recruited using social and traditional media
• The first 40 participants received nicotine patch while the remaining 45 received the CQSS2
• Participants reported their craving and withdrawal symptoms in real-time during the four days leading up to, and 14 days after, an assigned quit day.
• Craving (assessed on a 101-point scale) and withdrawal (affect, concentration, and anhedonia) were assessed during ~4-5 randomly-timed assessments each day; symptoms were also assessed during daily morning and evening reports
• Based on a non-inferiority limit of 12.4 points, 36 participants per arm would afford >80% power for testing our primary hypothesis

Results:

• Daily craving (Figure 1) and morning craving (Figure 2) followed the expected pattern, peaking soon after quit day and then gradually declining
• Consistent with the primary hypothesis, the CQSS2 was non-inferior to nicotine patch (p>.05)
• Withdrawal symptoms (negative affect, concentration, anhedonia) were consistent between groups (p>.05)

Discussion:

• Craving and withdrawal symptoms experienced while wearing CQSS2 were comparable to those experienced by smokers using nicotine patch
• These results suggest that the CQSS2 may be an effective treatment for smokers wishing to quit
• These results support further clinical investigations with CQSS2 in managing cravings for smoking cessation

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