

**Appendix S1. Focus group interview guide**

Drugs to control MS symptoms are often administered as an injection that is received approximately 3 times per week. New drugs have been developed and are under development that would differ in how they're administered compared to the drugs currently in use. These new drugs include oral drugs that would be taken each day and injected drugs that would be taken twice a year (a cluster of 3 shots at the start of the year and another shot at the end of the year; the schedule for booster shots is not yet determined).

The potential benefit of the oral drug is that patients may prefer to take drugs orally rather than as an injection. As well, in one oral drug that has already been tested, people using the oral drugs had lower rates of cancer and serious infections compared to people using injected drugs. There was also an absence of side effects associated with the injection, including redness, swelling, rash, skin hardening, tenderness, or mild bleeding. It is speculated that the effectiveness of the oral drugs would be comparable to that of injected drugs. The potential downsides are that the drug would be taken every day. Again comparing to the oral drug that has already been developed and tested, users of the drug had no flu like symptoms, but compared to people receiving a placebo, they had an increased level of respiratory distress, cardiovascular risk, swelling of the retina, and skin/breast cancer with these adverse effects occurring in between 1.3% to 2.5% of users.

The potential benefit of the new injectable drugs is that it will be received much less often (twice per year). This schedule of administration has potential risks that are greater than the risks for drugs injected on an on-going basis; there isn't the option of changing dosage or switching drugs in response to adverse events because the doses are taken within a very short time frame so the full dosage for the year would already have been taken when the adverse event occurs.

Today we'll be talking about what you think about the different ways of taking your drugs and we'll discuss what you think about oral versus injected routes of administration and how you weigh the risks and benefits. This information will be used to help us better understand what characteristics of drug therapy are important to you, such as whether you would accept less benefit from an oral drug than an injected, or accept greater risk of adverse effects from an injected drug that is received less compared to an injected drug received frequently.

1. What has your experience been like taking drugs that are administered by injection?

Probes: What was it like when you first started taking these drugs? How have your feelings about receiving an injected drug changed over time, if at all?

2. What has your adherence been like for your injected drugs? In other words, how have you done with taking the drug at all the times it is supposed to be taken and taking it in the prescribed way?

- a. What has affected your adherence?
  - i. What makes you adhere? What makes it difficult to adhere?
- b. How, if at all, has taking the drug as an injection affected adherence?
- c. How, if at all, do you think taking your drugs orally would affect adherence?
- d. How important do you think it is to take your drugs exactly as prescribed? (all the times you're supposed to take it, the dose you're supposed to take, the way you're supposed to take it).

<p>3. There is a new injectable drug under development that may be administered very infrequently, like a few doses close together at the start of the year and another dose at the end of the year. This administration schedule makes the drug effect irreversible for an extended period of time. How do you feel about the convenience of receiving a drug only a few times a year compared to the risk of having a drug effect that wouldn't be reversible for a long time?</p> <ul style="list-style-type: none"><li>a. For you to feel comfortable receiving this drug, what likelihood of side effect that are irreversible for a long time would you accept?</li><li>b. What would influence your decision about whether or not to use this new injected drug?</li></ul>
<p>4. How would you feel about switching from your current injected drug to a daily oral drug?</p> <ul style="list-style-type: none"><li>a. What do you see as the benefits of using an oral drug?</li><li>b. What do you see as the drawbacks of using an oral drug?</li></ul>
<p>5. Oral drugs might have a greater risk of side effects like dizziness and headaches and heart-related adverse events than current injected drugs and it's possible that other adverse effects may be identified as these drugs are developed and tested. How do you feel about the convenience of taking an oral drug a few times a year compared to the risk of having an adverse event from the drug?</p> <ul style="list-style-type: none"><li>a. What kind of side effects or adverse events would you be willing to accept?</li><li>b. For you to feel comfortable taking an oral drug, what likelihood of side effects or adverse event would you accept?</li><li>c. Would you accept less benefit from an oral drug relative to an injectable drug?</li></ul> <p>Putting aside the issue of injected versus oral administration and frequency of administration, in general how would you feel about switching to a drug that you haven't used before?</p> <ul style="list-style-type: none"><li>d. What would influence your decision about whether or not to switch?</li><li>e. How would you feel about switching to a drug that has just recently been developed?</li></ul>
<p>6. How do you feel about the frequency with which your drugs are taken? How important is the frequency of administration to you (whether drugs are taken daily, several times a week or annually)?</p> <ul style="list-style-type: none"><li>a. What do you see as the benefits of taking drugs on a daily or weekly basis? What are the drawbacks or risks?</li><li>b. What do you see as the benefits of taking drugs on an annual basis? What are the drawbacks or risks?</li></ul>
<p>7. Now let's consider a hypothetical situation. If you were to start drug therapy tomorrow for the first time, what would be most important to you?</p>
<p>8. Do you have any other comments you'd like to share?</p>