A STUDY ON PRESCRIPTION PREFERENCES OF NEUROLOGISTS CONCERNING THE DISEASE MODIFYING THERAPIES USED IN TREATMENT OF MULTIPLE SCLEROSIS IN PUNE

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Eisai

hhc

human health care

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Overview:

Therapeutic segment: Multiple sclerosis (MS)

Prevalence in India: 3/100,000

MS Product portfolio of Biogen-Eisai:

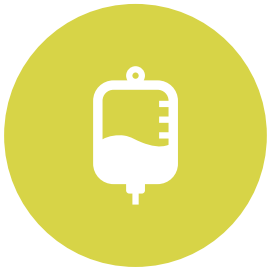
Avonex, Plegridy, Tecfidera, Tysabri

Current patient pool in Pune: 55

TYPES OF DMTS: ON BASIS OF MODE OF ADMINISTRATION

INJECTIONS

ORALS

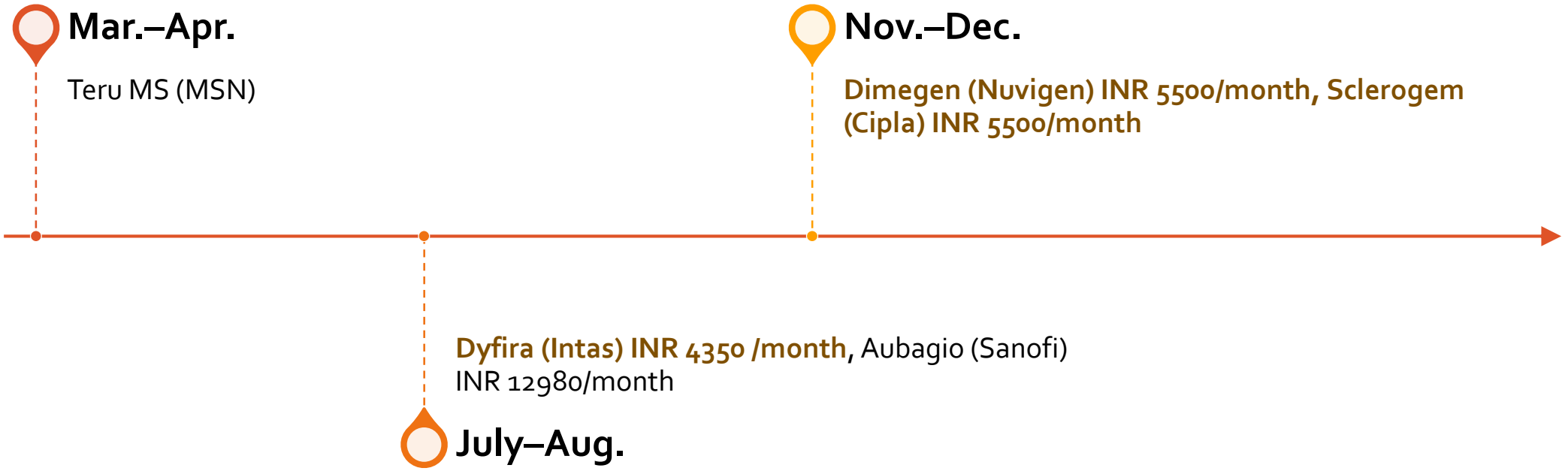


IV INFUSIONS

Prices of Eisai's MS product portfolio:

- Avonex: 10,000/month
- Plegridy: 16,000/month
- Tecfidera: 19,000/month
- Tysabri: 28,000/month

New Launches 2018



Research Methodology

RESEARCH QUESTION:

What is the prescription behavior of neurologists concerning the Disease Modifying Therapies used in treatment of multiple sclerosis?

Research Objectives

- **To determine the prescription preferences of neurologists regarding disease modifying therapies used in treatment of Multiple Sclerosis:**
- To determine the most preferred 1st line DMT by neurologists in newly diagnosed RRMS patients based on route of administration
- To determine the most preferred oral DMT brand for treatment of RRMS
- To determine the most preferred dimethyl fumarate brand used by the neurologists
- To determine the most preferred DMT in patients with high MS disease activity

- **To determine the reasons why Neurologists may not prefer Tecfidera**

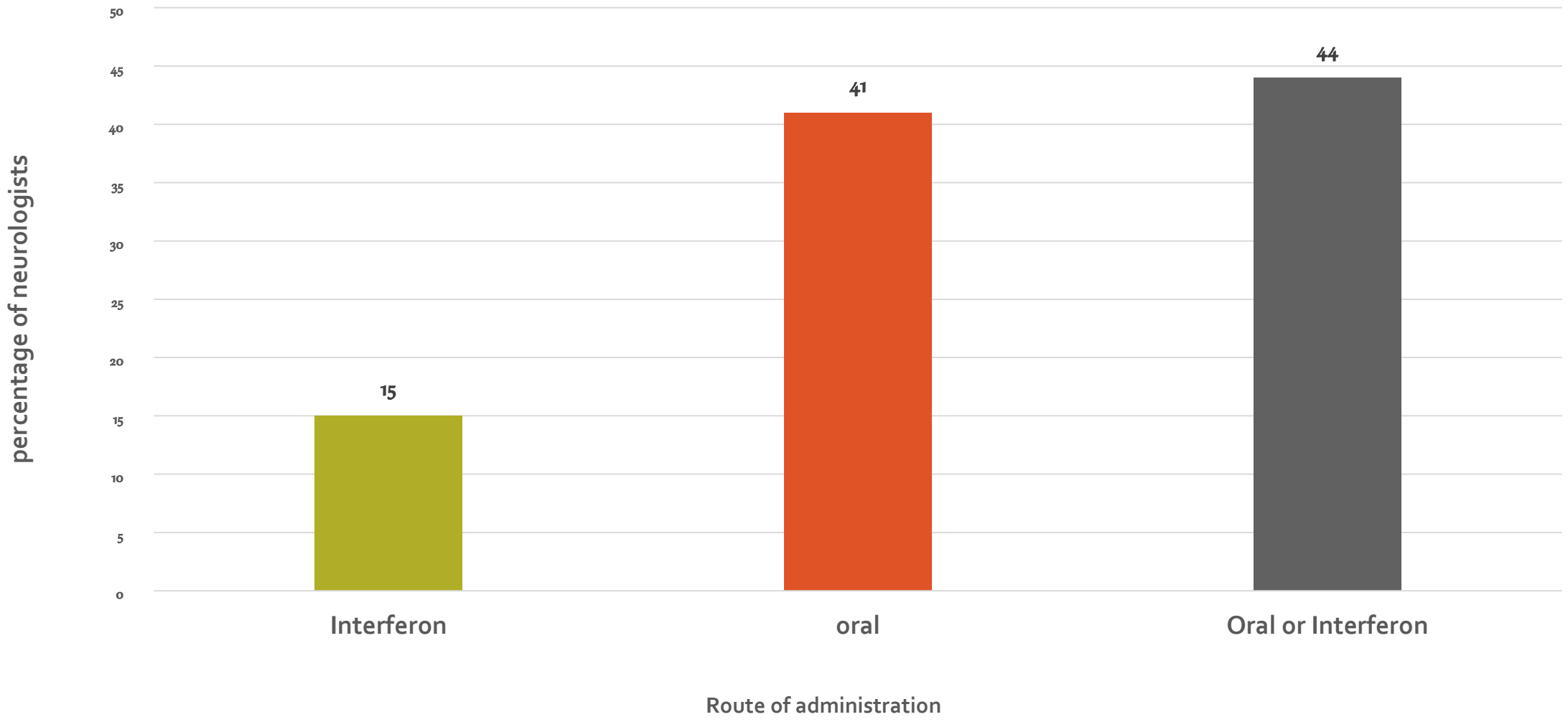
- **To compare the reasons for patient dropouts regarding Tecfidera (dimethyl fumarate), Avonex (interferon beta 1a) and Plegridy (peginterferon beta 1a), pre and post generic launch.**

- **Type of study-** Descriptive cross-sectional study.
- **Study population-** Neurologists
- **Study area-** Pune
- **Duration of Study**– The study was conducted for the duration of three months of February 2019 to May 2019.
- **Type of Data-** Qualitative
- **Sample size** – Total sample size was 34 neurologists
- **Inclusion criteria-** Neurologists with experience of MS treatment
- **Data collection-** Personal interviews
- **Data entry-** MS Excel

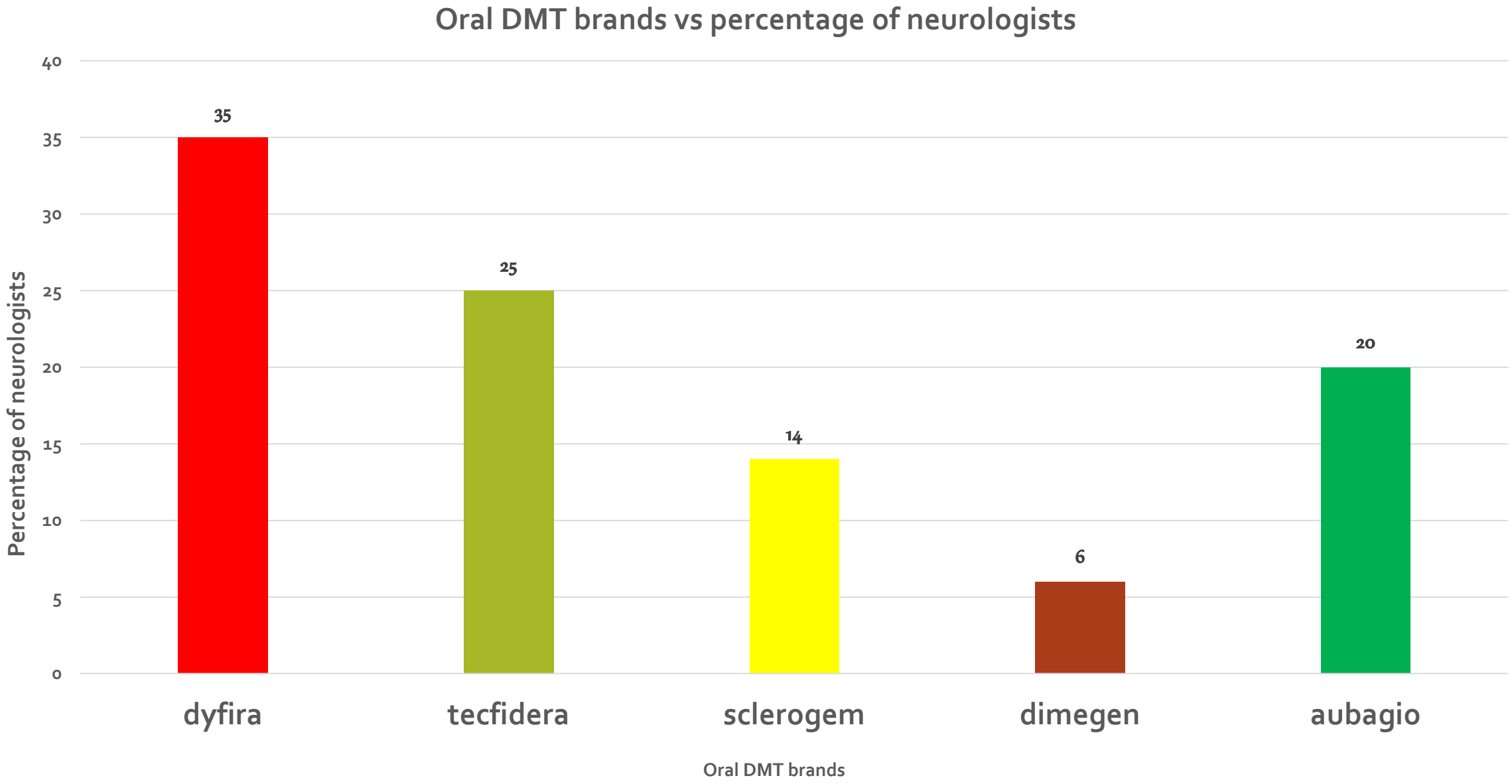
OBSERVATIONS AND RESULTS

MOST PREFERRED 1ST LINE DMT BY NEUROLOGISTS IN NEWLY DIAGNOSED RRMS PATIENTS BASED ON ROUTE OF ADMINISTRATION

Route of administration vs percentage of neurologists

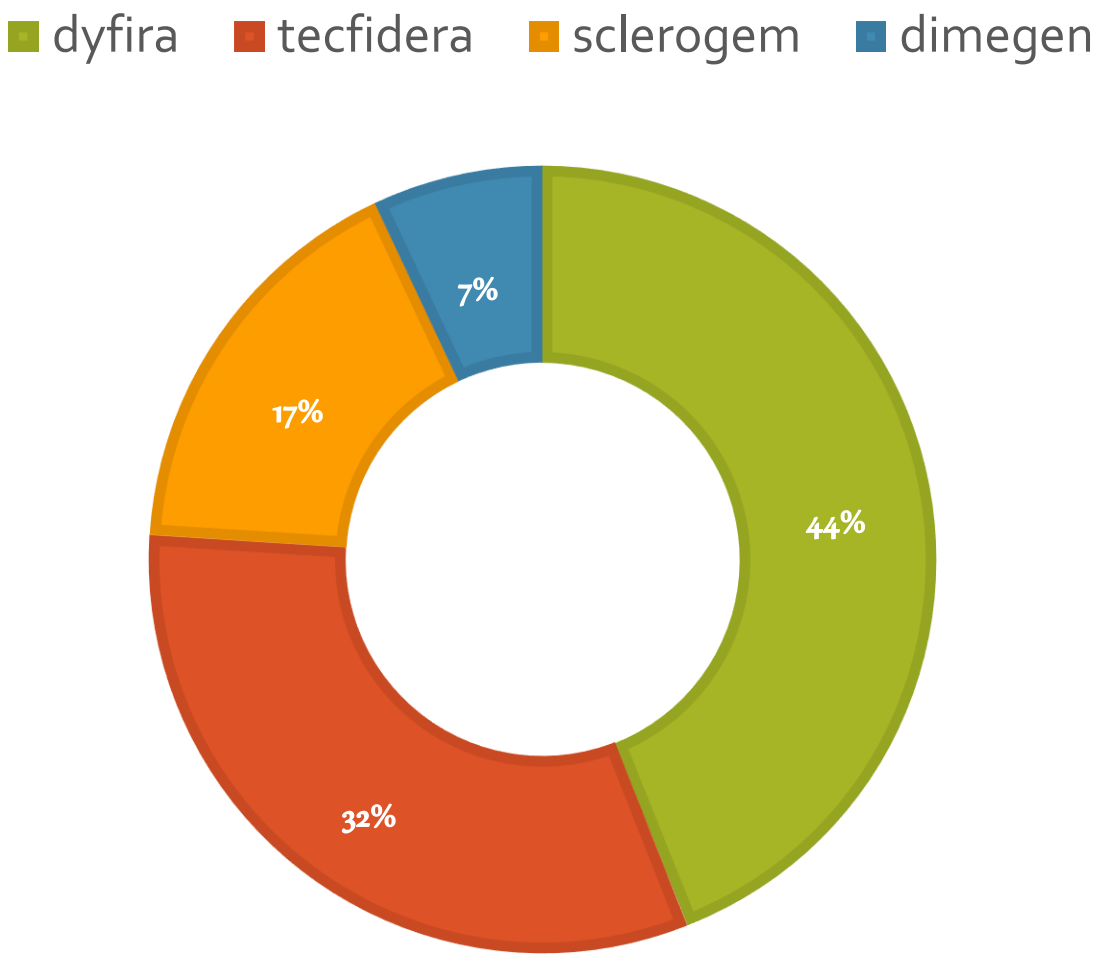


MOST PREFERRED ORAL DMT BRAND FOR TREATMENT OF RRMS:


Oral DMT brands vs percentage of neurologists
Percentage of neurologists
40
35
30
25
20
15
10
5
0
35
25
14
6
20
dyfira
tecfidera
sclerogem
dimegen
aubagio
Oral DMT brands

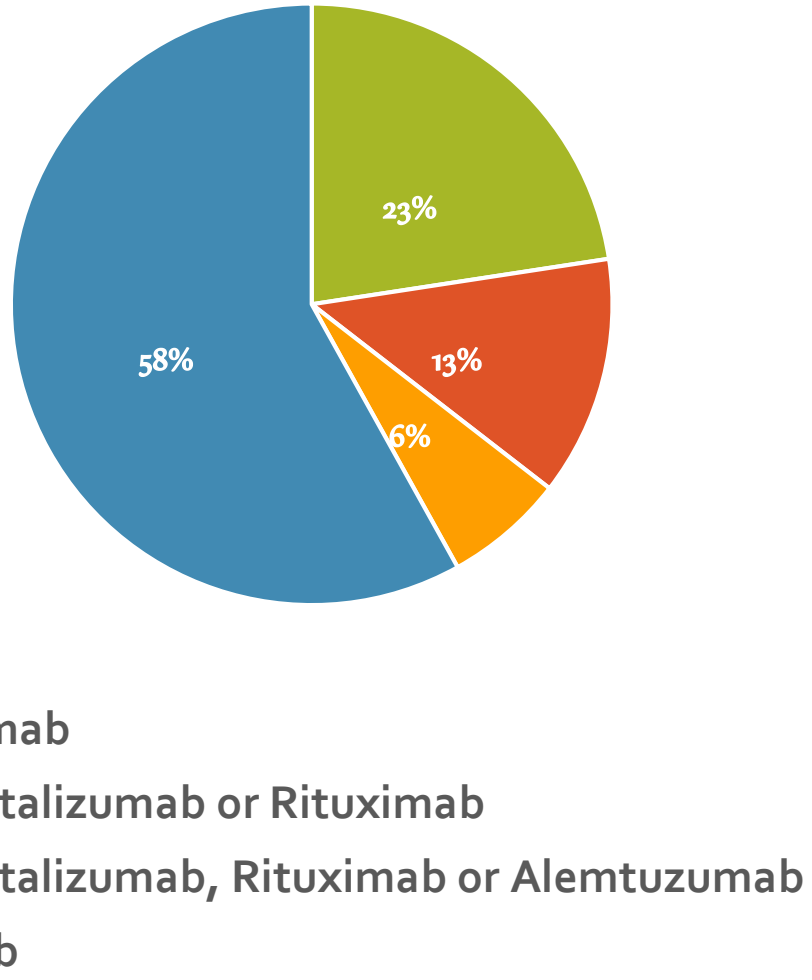
MOST PREFERRED DIMETHYL FUMARATE BRAND BY THE NEUROLOGISTS:

PERCENTAGE OF NEUROLOGISTS PREFERING DIFFERENT DIMETHYL FUMARATE BRANDS

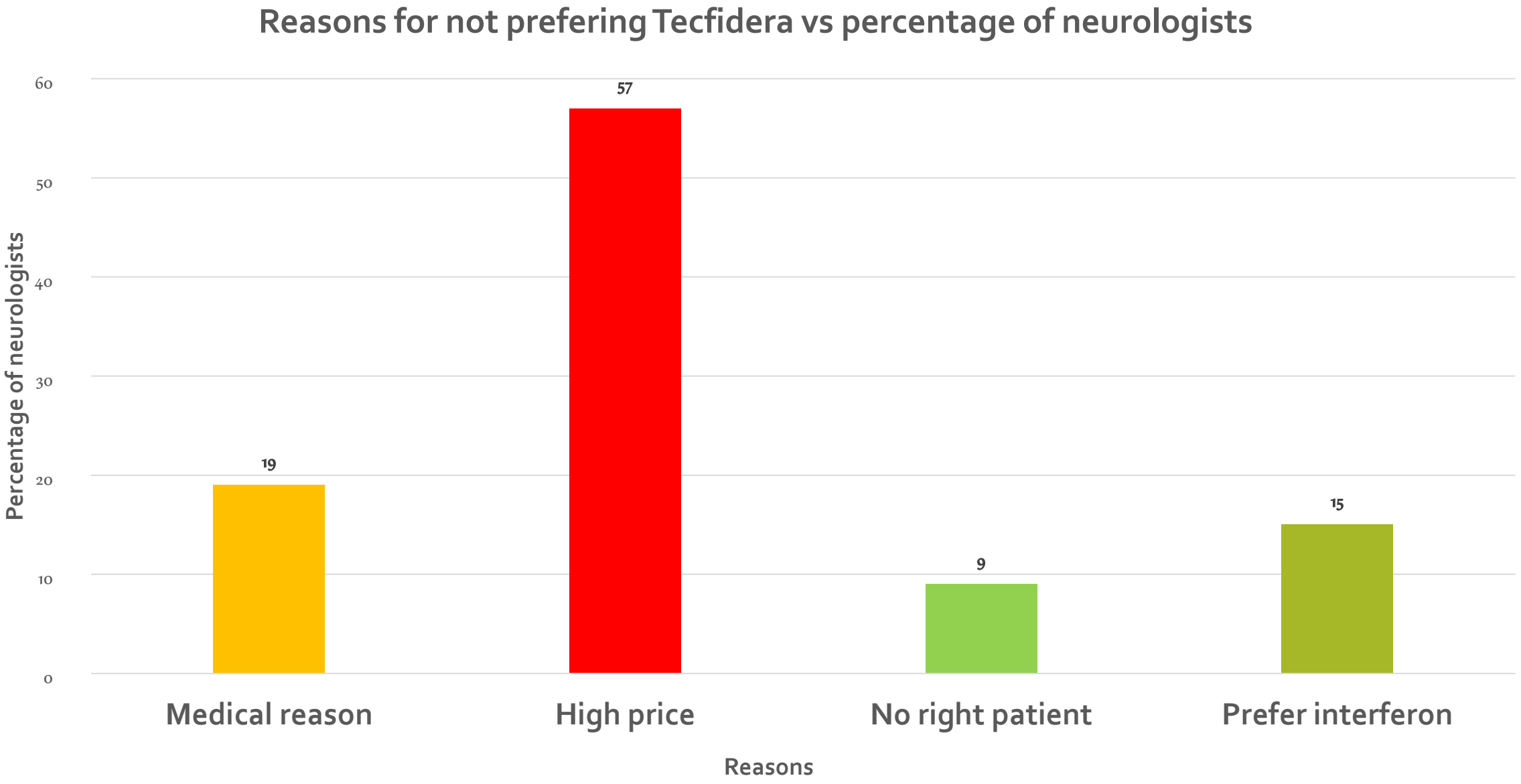


MOST PREFERRED DMT IN PATIENTS WITH HIGH MS DISEASE ACTIVITY:

DMTs preference in high disease activity MS patients

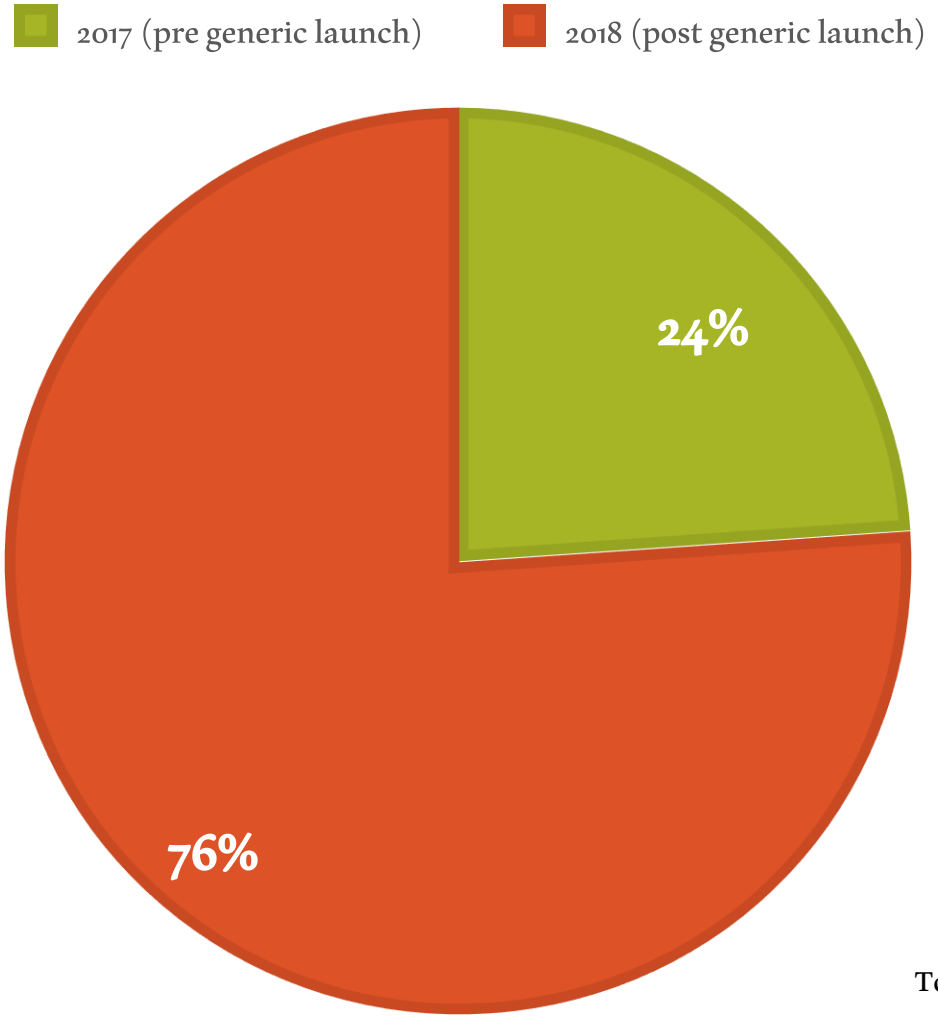


REASONS WHY NEUROLOGISTS MAY NOT PREFER TECFIDERA:

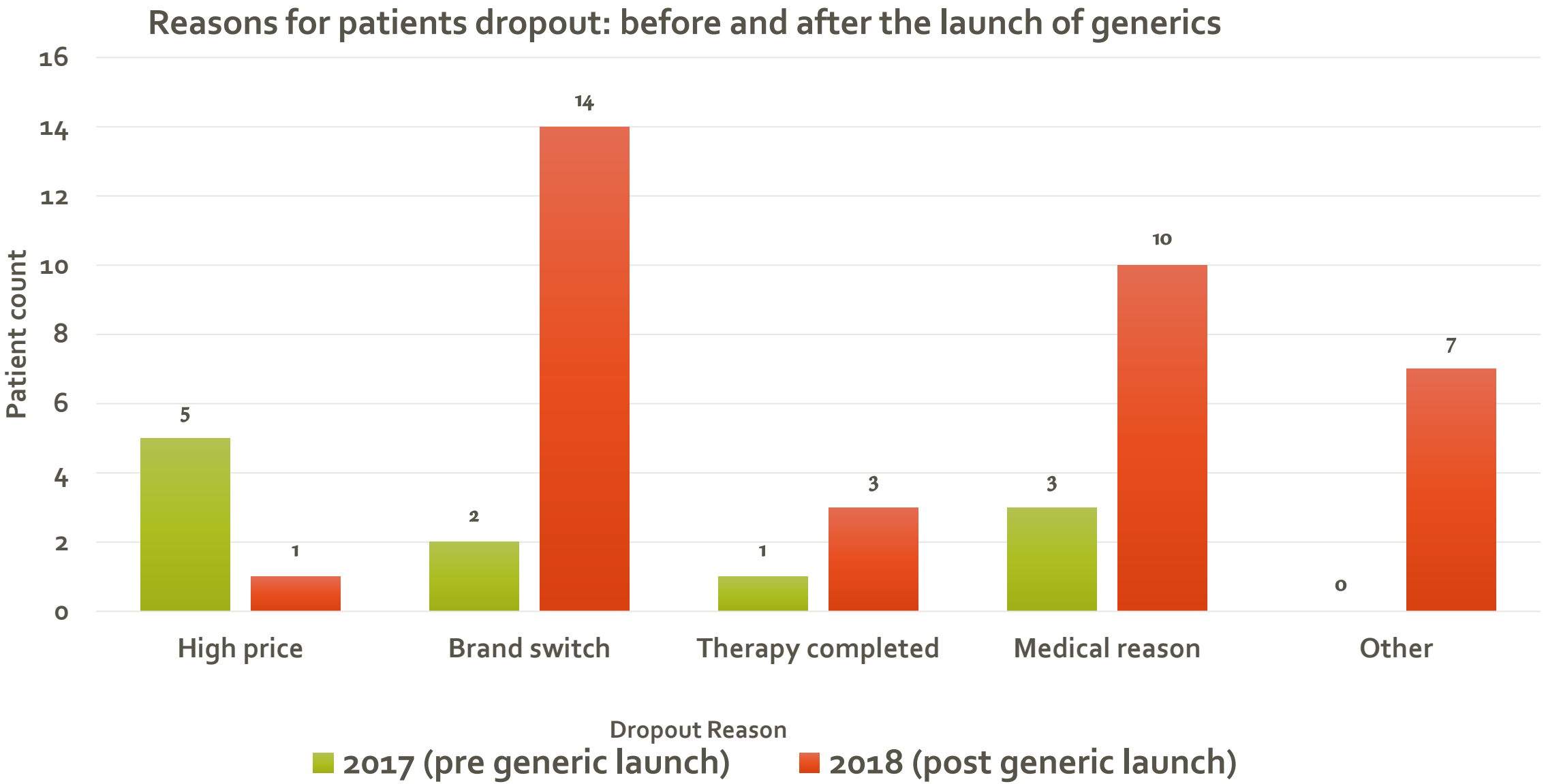

Reasons for not prefering Tecfidera vs percentage of neurologists
Percentage of neurologists
60
50
40
30
20
10
0
19
57
9
15
Medical reason
High price
No right patient
Prefer interferon
Reasons

COMPARISON OF THE REASONS FOR PATIENT DROPOUTS FROM TECFIDERA, AVONEX AND PLEGRIDY PRE AND POST GENERICS LAUNCH

Total Dropouts



Total patients dropped out= 46


Reasons for patients dropout: before and after the launch of generics
Patient count
16
14
12
10
8
6
4
2
0
5
1
2
14
1
3
3
10
0
7
High price
Brand switch
Therapy completed
Medical reason
Other
Dropout Reason
2017 (pre generic launch)
2018 (post generic launch)

Findings

- 44% neurologists in study prefer prescribing DMTs having either oral or injection route of administration. However, 41% neurologists prefer only orals as 1st line and 15% prefer to use interferons.

· 35% neurologists in study prefer Dyfira among oral DMT brands available. 25% prefer Tecfidera and 20% prefer Aubagio.

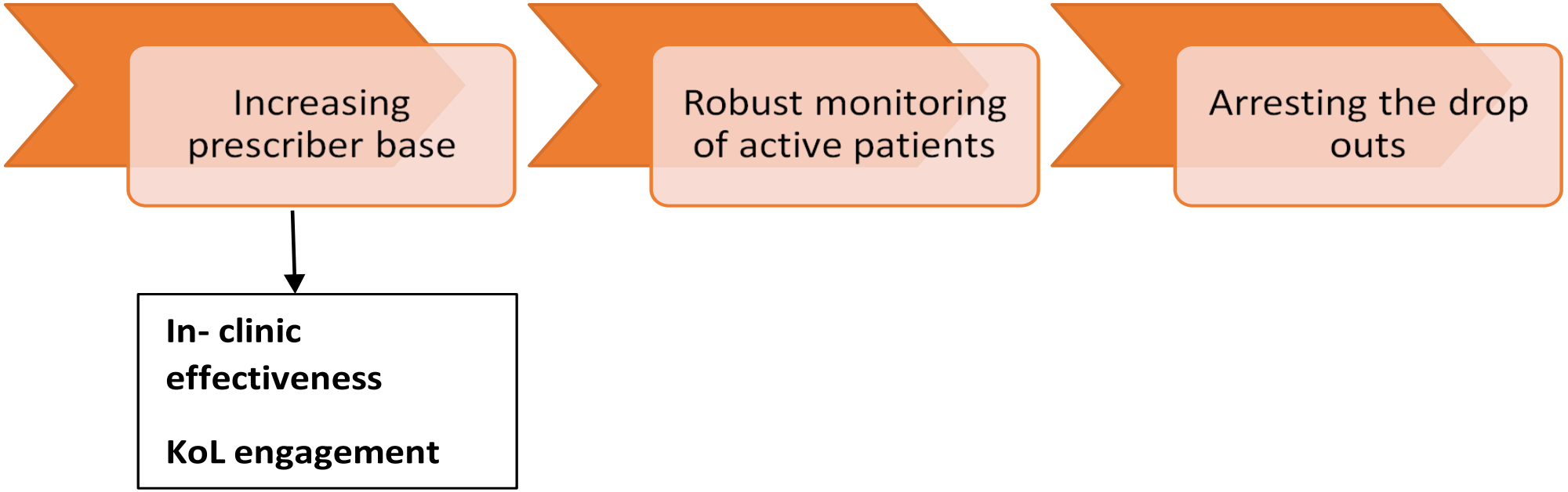
· Dyfira is most preferred brand among dimethyl fumarate brands (44%) closely followed by Tecfidera (32%).

- 58% neurologists prefer Rituximab in patients with high disease activity MS. 23% prefer Natalizumab and 13% neurologists are neutral about Natalizumab or Rituximab.

- There were 46 patient dropouts in 2017 and 2018, and generics were launched in 2018.
- 76% patients out of the total dropouts occurred, were in 2018 as compared to 24% dropouts in 2017.
- Out of 35 dropouts occurred in 2018, 14 were due to brand switch.

- Market is shifting towards orals
- Threat from off label Rituximab
- Dyfira – major competitor in oral generics, Aubagio poses indirect threat
- Direct and indirect impact on entire portfolio post generic orals launch; interferon's USP is not getting leveraged sufficiently.
- Even though cost of Tecfidera is high, market is still not lost completely: brand loyalty

Suggestions - Sailing through the red ocean



- Create a sense of brand loyalty among health care practitioners: **Brand advocates** can be identified and, in this way, correct patient for Tecfidera can be enrolled.
- Increase patient pool by organizing awareness drives along with KoL engagement, increase reach to newer institutions.
- Tactical plans: e.g. world MS day initiatives

- Patients assistance program– more economical schemes and its aggressive promotion

- Thank you