#### Understanding off-label use and the information needs of patients: a pilot Eurordis survey in rare diseases



Drug Information Transparency and Access (DITA) Task Force Compiled by Rob Camp and Richard West EMM Dubrovnik; 30 May-01 June 2013







- 4000 to 6000 distinct rare diseases
  - Defined as <1/2000 or <250,000 patients EU-wide
  - 4-6% of EU population affected
- More than 1000 OMP designated
  - Of which 71 are authorised for 83 rare indications
- Most patients with a rare disease are not treated with an authorised orphan medicine
  - when they are treated
- Off-label use is the rule, not the exception in RD
- 18% of patients with a RD rejected by HCP
  - 85% due to disease complexity (EurordisCare 3 survey)

### One example



- Jenny's parents' garage
- In infancy, J was diagnosed with cystinosis
- Medically, she suffered renal failure by the age of 6 (+ hypothyroidism, insulin-dep. diabetes, hepato-splenomegaly with hypertension, muscle and cerebral involvement, photophobia)
- Her parents refused to sit idly by
- They contacted pharma companies
- They learned how to treat their child "offlabel", where nobody had been before
- Getting information directly from the company was life-saving
- Jenny received daily dialysis until age 22
- Her parents created Climb, the National Information Centre on Metabolic Diseases in the UK, so children like Jenny can live longer





#### Document patients' experience with OL use

Learn about the information patients receive

Create database of off-label uses in rare diseases

Explore how patients handle ADRs with OL use

Define future actions on OL use in rare diseases

OL: Off-label

ADRs: Adverse Drug Reactions

24-25/09/2012



#### 90 conditions, 105+ off label uses



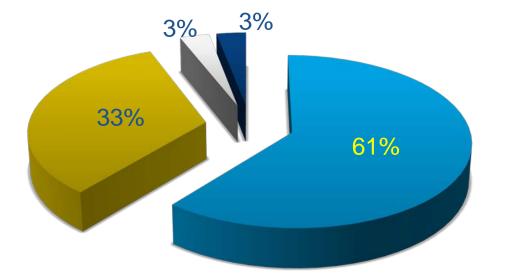
| Condition         | Product     | Indication  | Off label use   |
|-------------------|-------------|---|---|
| Dravet syndrome   | Urbanyl     | Epilepsy, but not<br>recommended for<br>use in children<br>between the ages<br>of six months and<br>three years | 5 mg twice a day since the<br>age of 6 months.<br>With micropakine, diacomit,<br>epitomax |
| Friedreich Ataxia | Idebenone   | Alzheimer's<br>disease and other<br>cognitive defects   | 720 mg/day for 12 years   |
| Behcet disease    | Thalidomide | Multiple<br>myeloma   | 1 mg/kg/week to<br>1 mg/kg/day  |





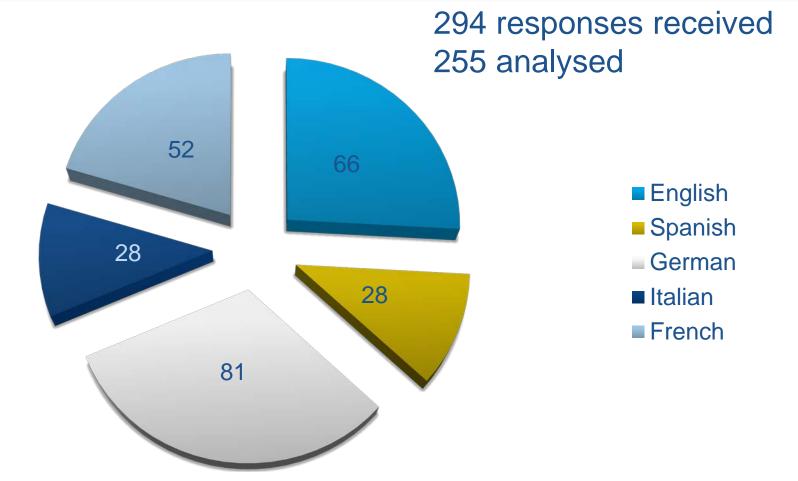
- Online survey, 5 languages
- Short description on what is off-label, why we were doing the survey with (18) questions
- Open for 2 months (Eng) or 1 month (other languages), May-Jul 2012
  - One reminder sent in all languages, two in Spanish
- Developed by DITA at Eurordis from Nov 2010
- Target population people with rare diseases who had used drugs off-label in the past



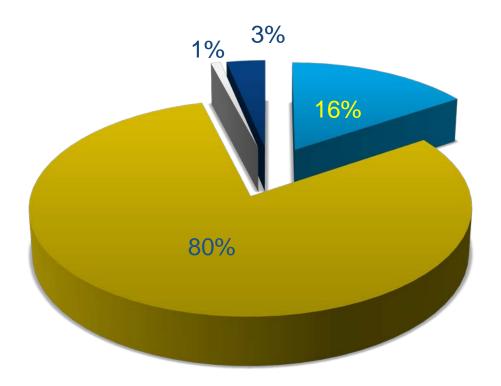


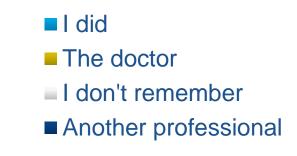
- The person taking the treatment
- A parent
- Another family member
- Another care provider







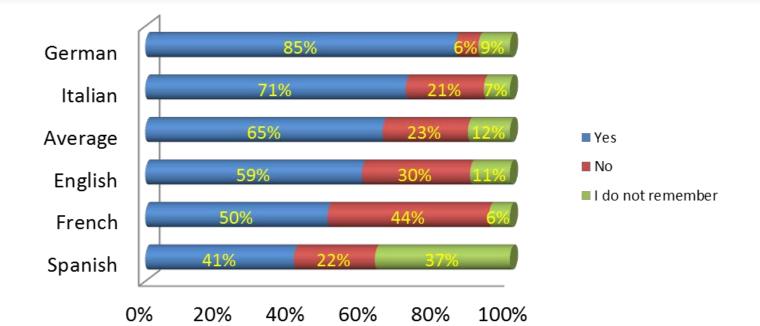






## Was it explicitly discussed that the drug was off-label?



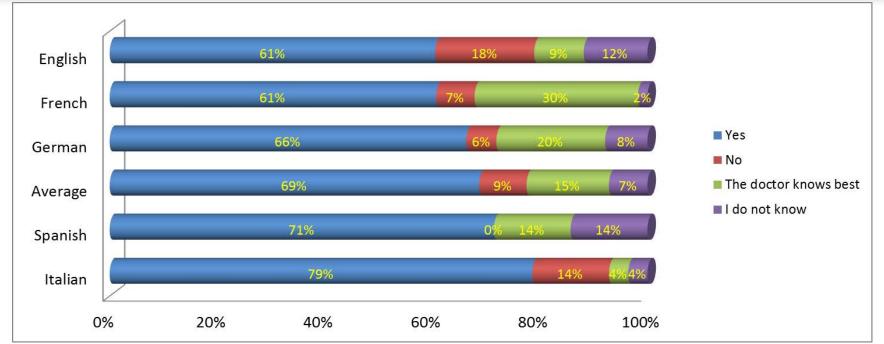


|         | Yes | No | I do not remember |
|---------|-----|----|-------------------|
| German  | 69  | 5  | 7                 |
| Italian | 20  | 6  | 2                 |
| English | 38  | 19 | 7                 |
| French  | 26  | 23 | 3                 |
| Spanish | 11  | 6  | 10                |
| TOTAL   | 164 | 59 | 29                |

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### Should there be more explanation about risk/benefit?





|         | Yes | No | The doctor knows best | l do not know |
|---------|-----|----|-----------------------|---------------|
| French  | 34  | 4  | 17                    | 1             |
| English | 46  | 14 | 7                     | 9             |
| German  | 59  | 5  | 18                    | 7             |
| Spanish | 20  | 0  | 4                     | 4             |
| Italian | 22  | 4  | 1                     | 1             |
| TOTAL   | 211 | 27 | 47                    | 22            |

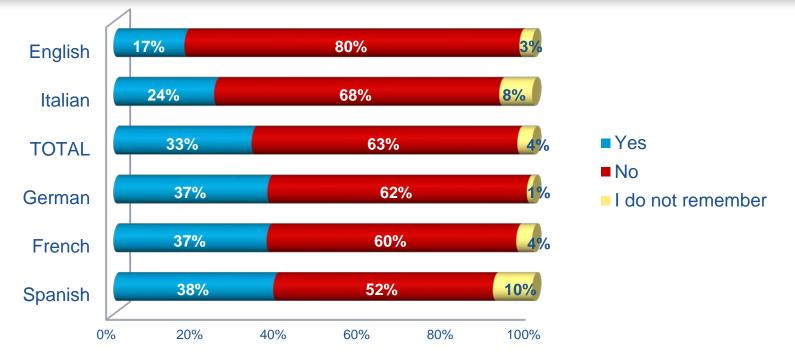
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### Common "more explanation" comments 🔅

- ...the side effects are what patients should be told about, and how severe (they may be)
- We did not know it was an off-label indication until my father went blind due to the drug
- Helpful a phone line, email link, Internet research, signed written consents
- The doctor was very clear, I understood it all...
- I find myself desperately accepting whatever the doctor offers...
- Doctors do not know everything

# Were there adverse events while taking the drug?





|         | Yes | No  | l do not remember |
|---------|-----|-----|-------------------|
| English | 11  | 52  | 2                 |
| Italian | 6   | 17  | 2                 |
| German  | 29  | 49  | 1                 |
| French  | 19  | 31  | 2                 |
| Spanish | 8   | 11  | 2                 |
| TOTAL   | 83  | 160 | 9                 |

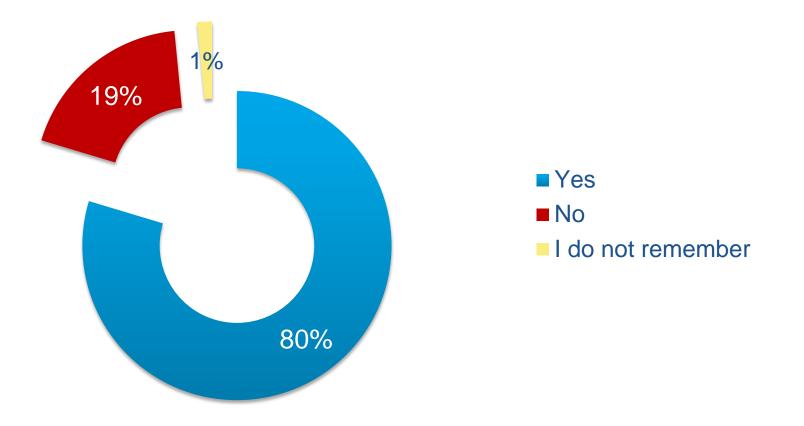
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#### Adverse events descriptions

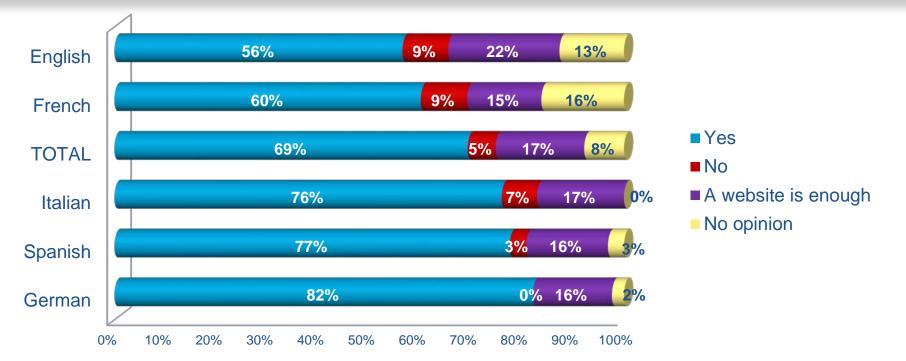


- ...it did incapacitate my abilities of clear and rapid thinking permanently, it produces a mental blockage and intracranial pressure. It also caused constipation and/or diarrhoea.
- (there has been a drop) in my blood platelets, haemoglobin and red cells. I have required various transfusions of platelets and red corpuscles
- the copper ... gets deposited in the brain, he was temporarily incapacitated, ... was hospitalised and now has some sequelae
- Severe aches, itching, headaches, dizziness and hyper-sex drive which continued for approx 5 years - never investigated by a health professional or even warned (about them)...
- Tunnel vision, lack of coordination, frequent falling, impaired brain function, blackouts. While driving home from work, I blacked out in the car for several seconds.
- Nerve end damage to my fingers and feet. Pins and needles in my feet and hands. I was violently ill, throwing up, fever, rash - no permanent damage





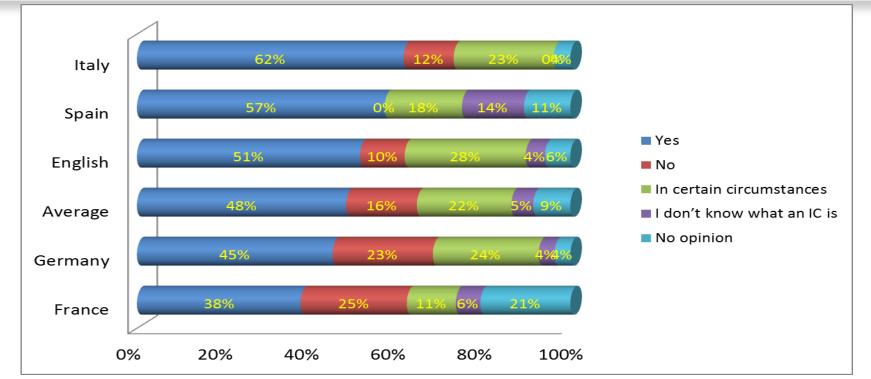
## Should there be a dedicated help line to report side effects?



|         | Yes | No | A website is enough | No opinion |
|---------|-----|----|---------------------|------------|
| English | 44  | 7  | 17                  | 10         |
| French  | 33  | 5  | 8                   | 9          |
| Italian | 22  | 2  | 5                   | 0          |
| Spanish | 24  | 1  | 5                   | 1          |
| German  | 68  | 0  | 13                  | 2          |
| TOTAL   | 191 | 15 | 48                  | 22         |

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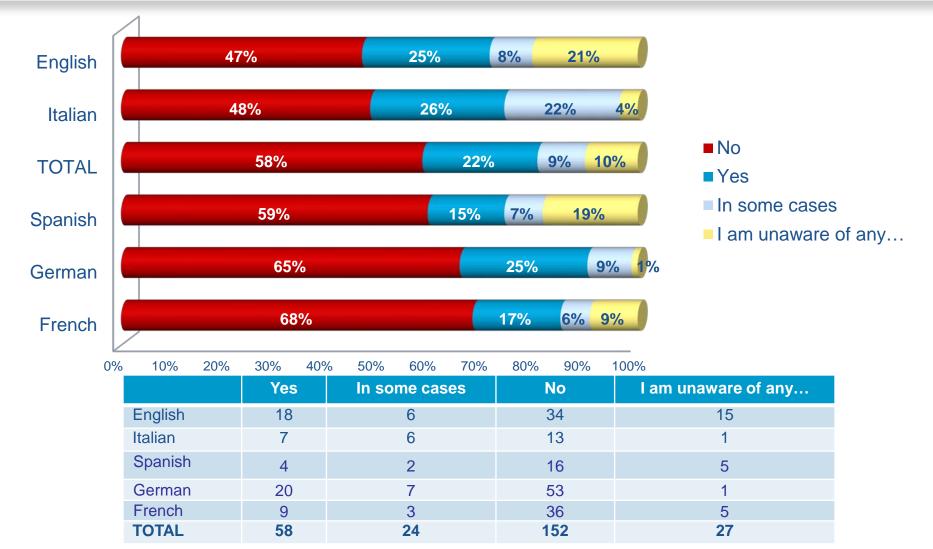
## Should an informed consent form be required for off-label?



|         | Yes | No | In certain circumstances | I don't know what an IC is | No opinion |
|---------|-----|----|--------------------------|----------------------------|------------|
| Italian | 16  | 3  | 6                        | 0                          | 1          |
| Spanish | 16  | 0  | 5                        | 4                          | 3          |
| English | 35  | 7  | 19                       | 3                          | 4          |
| German  | 37  | 19 | 20                       | 3                          | 3          |
| French  | 20  | 13 | 6                        | 3                          | 11         |
| TOTAL   | 124 | 42 | 56                       | 13                         | 22         |

# Were there any supply or reimbursement issues?

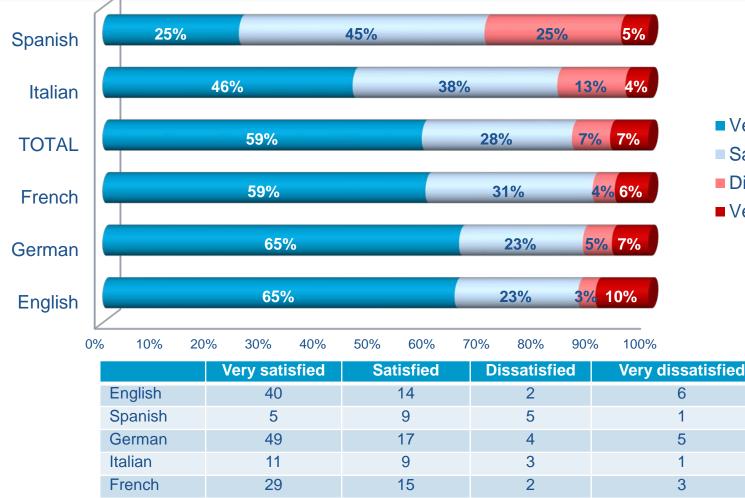




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# Your rating of the off-label experience





- Very satisfied
- Satisfied

16

- Dissatisfied
- Very dissatisfied

TOTAL

134

16

63

### Your OL experience



- There aren't many specific treatments and there is not a lot of research because it isn't money-making for the big pharma companies, (so) other drugs do help alleviate some of the symptoms, although they are not indicated, and as long as they explain about the risk/benefit, it (the OL) seems fine to me
- It (the treatment) seems to be working
- The treatment has given me 18 months remission and I have not had to take any other medication since my treatment
- I do think that records should be kept of off-label usage so they can be collated to inform both medics and patients of the success or otherwise of the drug ...
- Depends on the drug some are failures, others work well
- No significant changes, the condition is not getting worse
- It worked but there are lots of side effects





- Patients' and doctors' ability to communicate fully is limited
  - OL risks can be ameliorated by fuller communication at all steps in the therapeutic process
- Patients' understanding of OL is limited
- Types of adverse events here are significant even when only 1/3 experience them, those who do have stories to tell
- The less information/understanding of OL, the less comfortable with OL & their treatment a person may be
  - Does this also coordinate with comfort of being able to share with your doctor?
- Patients need and want more (and better) treatments
- Patients need and want more information
  - How can this be done?



#### Back up slides

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#### 90 conditions, 105+ off-label uses

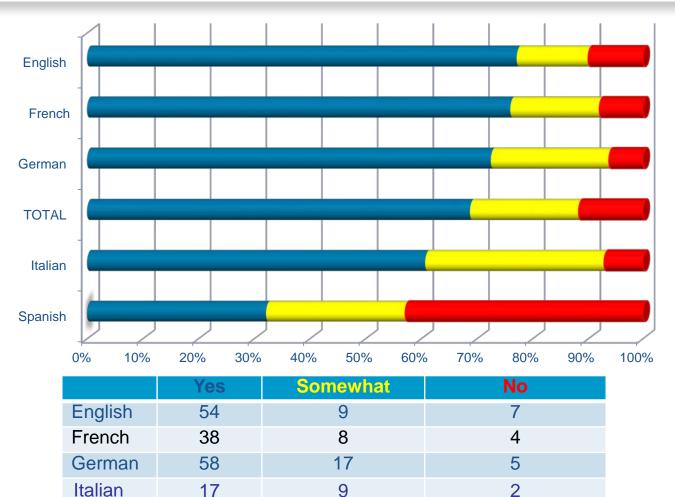


| Condition  | Product          | Indication   | Off label use  |
|--|------------------|--|--|
| Sotos syndrome +<br>congenital heart<br>disease + heart<br>failure as a baby | IV<br>furosemide | congestive heart<br>failure and edema  | As a baby used IV furosemide<br>orally to reduce fluid load as<br>there was no suitable per os<br>dose   |
| Macular<br>degeneration  | Avastin          | Renal Cell<br>carcinoma, Non-<br>Small-Cell Lung<br>carc., Breast,<br>Colorectal and<br>Ovarian<br>neoplasms | My father had an injection of<br>Avastin for macular degeneration<br>on 20/02/2012 and the drug was<br>contaminated.<br>He went blind within two hours. I<br>now know 14 patients who were<br>affected by this batch |
| Narcolepsia<br>cataplexia  | teronac          | Short-term (i.e., a<br>few weeks)<br>treatment of<br>exogenous obesity<br>(amphetamine like)                 | 1 dose per day, lifelong, with<br>Modiodal and Effexor   |



### Were you comfortable with it being off-label?





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Spanish

TOTAL

9

176

DITA task force - joint PCWP/HCPWP

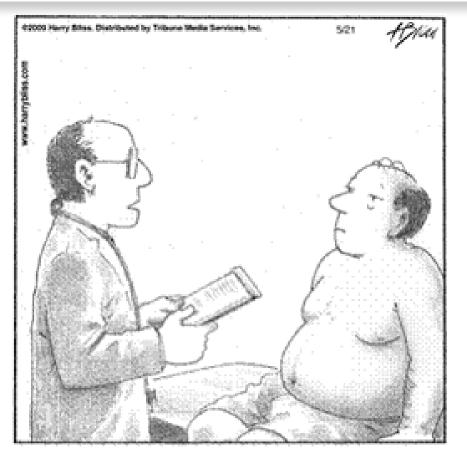
7

50

12

30





"Well, yes, I suppose I could explain the test results in 'plain English' — but then you'd know how sick you are."