

Single Day Event

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Becoming A “Lazy” Programmer with New Tech – Innovation Cases Sharing



Agenda

- Why new tech?
- Innovation cases sharing
- Future application



Why new tech?

■ Turn the laziness into efficiency

“Progress isn't made by early risers. It's made by lazy men trying to find easier ways to do something.”
— Robert Heinlein

■ Open source technologies are developing rapidly

- Growing user communities
- Rich resources
- License



I need to work in a community.

Use the [license preferred by the community](#) you're contributing to or depending on. Your project will fit right in.

If you have a dependency that doesn't have a license, ask its maintainers to [add a license](#).



I want it simple and permissive.

The [MIT License](#) is short and to the point. It lets people do almost anything they want with your project, like making and distributing closed source versions.

[Babel](#), [.NET Core](#), and [Rails](#) use the MIT License.



I care about sharing improvements.

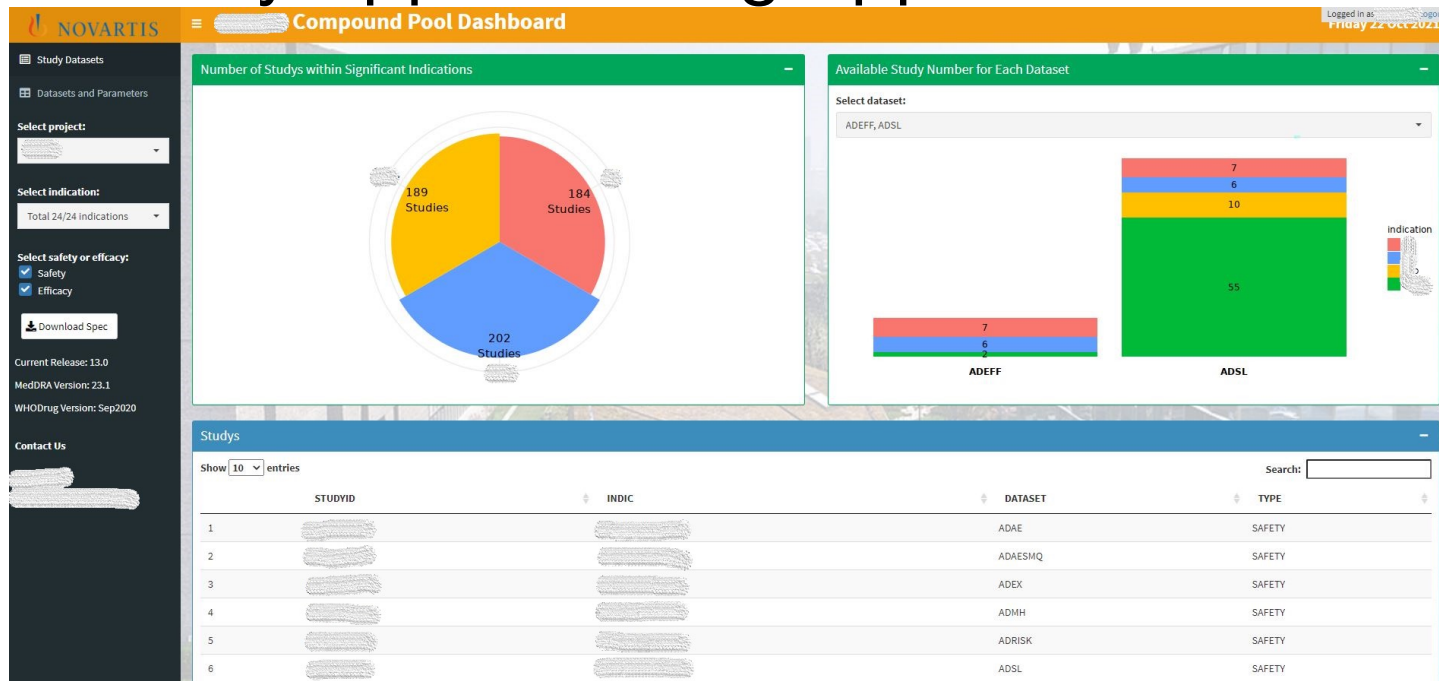
The [GNU GPLv3](#) also lets people do almost anything they want with your project, *except* distributing closed source versions.

[Ansible](#), [Bash](#), and [GIMP](#) use the GNU GPLv3.

■ Trends in the pharma industry

Innovation cases sharing

■ R shiny Apps: Pooling App





Innovation cases sharing

■ R shiny Apps: Deliverables tracker

Logged in as [redacted] Logout

Output list & Search

Based on PDT under [redacted]

Search TFL content

Searching path
under your view

Combine output(s) in this page

Combine selected output(s)

Clear selection

Show 10 entries

Search:

PDT_Path	Information	TFL_File	Develop	QC	Title_Population	Footnote
All	All	All	All	All	All	All
[redacted]	CSR SAF Table 14.3.1-1.20 PTL001	a2201_table_1431_1_20_lb.rtf	t_lb_adr.sas	t_lb_adr_qc.sas	Adverse drug reactions (Safety set)	N: number of subjects in the safety set. n represent counts of subjects. [SAE = serious adverse event LT = life threatening] Frequency category is based on the following convention: very common ($\geq 1/10$), common ($\geq 1/100$ to $< 1/10$), uncommon ($\geq 1/1,000$ to $< 1/100$), rare ($\geq 1/10,000$ to $< 1/1,000$), very rare ($< 1/10,000$). Only AEs occurring during treatment or within 30 days of the last study medication are reported. MedDRA version 22.0, CTCAE version V4.03. Case Retrieval Strategy version released 29JUL2019. Cut-off date: 15APR2019.
[redacted]	SAF Figure e1-1 IFP0001	fe1_01.rtf	if_expl_1.sas		Time to first occurrence of grade 3 or worse AESI (All NSCLC subjects) Liver metastases = Yes (Safety set)	[Source: Figure 2.2.5-1
[redacted]	SAF Figure e1-2 IFP0002	fe1_02.rtf	if_expl_2.sas		Time to first occurrence of grade 3 or worse AESI (All NSCLC subjects) Prior immuno oncology = Yes (Safety set)	[Source: Figure 2.2.5-2
[redacted]	SAF Table e1-1 PTL003	te1_01.rtf	it_expl_1.sas		Treatment-related adverse events by preferred term by Liver metastases (All NSCLC subjects) (Safety set)	Numbers (n) represent counts of subjects. A subject with multiple severity grades for an AE is only counted under the maximum grade. MedDRA version 21.1, CTCAE version 4.03 [Source: Table 2.2.1-3a



Innovation cases sharing

- R shiny Apps: SAS macro database

The screenshot shows an R Shiny application interface. On the left is a sidebar with three tabs: 'List' (selected), 'Fig', and 'Sim'. The main content area has a header bar with a 'Download selected macro' button. Below this is a table with three columns: 'macroFolder', 'macro', and 'head'. The 'macroFolder' and 'macro' columns have dropdown menus currently set to 'All'. The table lists various SAS macros with their full paths and names, and each row has a 'show/hide' button in the 'head' column.

macroFolder	macro	head
util/GPS_Macro_library/Utility_Macro/	%u_prerep	show/hide
util/GPS_Macro_library/Utility_Macro/	%u_postrep	show/hide
util/stl/V1.6/usermacro/	%stlrun	show/hide
REPCENTRAL/ToolBox/GSK/Macros/	%tu_putglobals	show/hide
REPCENTRAL/ToolBox/GSK/Macros/	%ts_setup	show/hide
REPCENTRAL/ToolBox/GSK/Macros/	%tu_abort	show/hide
REPCENTRAL/ToolBox/GSK/Macros/	%tu_tidyup	show/hide
util/Oncology/TFL/Code/	%_std_readparam	show/hide
REPCENTRAL/ToolBox/GSK/Macros/	%tu_chkvarsexist	show/hide
util/stl/V1.6/stlmacro/	%report	show/hide
util/TSCG_macros/	%symexist	show/hide
util/GSK/macros/	%tu_nobs	show/hide
REPCENTRAL/ToolBox/GSK/Macros/	%tu_attrib	show/hide
util/Oncology/TFL/Code/	%std_onc_dev_frq_table	show/hide
util/GSK/macros/	%tu_list	show/hide



Innovation cases sharing

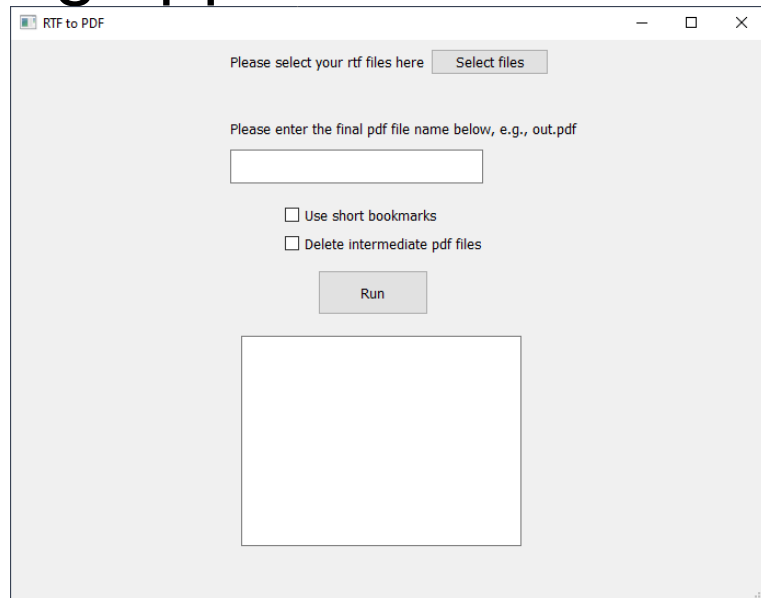
- Multi-system RTF packaging app

- Windows: Python



- Linux: Shell

```
[wangch5s@GLCHBS-SP200209 ~]$ echo Hello, PhUSE SDE Shanghai!  
Hello, PhUSE SDE Shanghai!
```





Innovation cases sharing

■ Paper database

DO NKC

Knowledge Library

All Knowledge

Data Standards

Submission

Programming

Graphics

CDISC SDTM

CDISC ADaM

Safety Analysis

Efficacy Analysis

Oncology Analysis

Coding Techniques

AI/ML/BI

Regulations

Real World Data

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Search

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Clear Selection

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Innovation cases sharing

- Apps for NMPA submission: Define translator

DefineXML中文翻译助手 (版本: Beta Ver. 1.0)

请选择项目: 请选择项目号 SDTM ADaM 刷新

原始Define.XML: 📁 📄

中文标签文件: 📁 📄

中文说明文件: 📁 📄

输出Define.XML: 📁 📄

翻译对象

☐ 全选 ☒ 数据集标签 ☒ 变量标签 ☒ 衍生逻辑 ☐ 编码列表 ☒ 注释 ☒ 补充修饰变量

中英对照

☐ 全选 ☐ 数据集标签 ☐ 变量标签 ☐ 衍生逻辑 ☒ 编码列表 ☐ 注释

翻译 退出

[Visit CDISC Wiki on CT](#) Powered by Stanley Wei, Novartis



Innovation cases sharing

■ Apps for NMPA submission: NMPA toolkits

NMPA中文翻译助手

目 翻译字典库

数据集标签

变量标签

变量衍生逻辑

编码列表

药品名称集

CRF问卷库

其他术语集

待审核术语集

数据集标签

变量标签

变量衍生逻辑

编码列表

CRF问卷

药品名称

其他术语

研究编号

---Show All---

---Show All---

库

组

机

11 时 56 分 54 秒

Zhijun Wei

新增 全选 清除选定 全部 A B C D E F H I L M N O P Q R S T U V

总共 10 条术语 < 1 > 10 / page

	#	名称	英文	中文	状态	添加时间
+	1	FAAE	Findings About Adverse Events	不良事件相关发现	LOCKED	2021-08-10T14-15-53
+	2	FAZT	Findings About Antineoplastic Therapies	抗肿瘤治疗相关发现	LOCKED	2021-08-10T14-15-53
+	3	FACE	Findings About Clinical Events	临床事件相关发现	LOCKED	2021-08-10T14-15-53
+	4	FACM	Findings About Concomitant Medications	既往与合并用药相关发现	LOCKED	2021-08-10T14-15-53
+	5	FACM	Findings About Concomitant Meds	既往与合并用药相关发现	LOCKED	2021-08-10T14-15-53
+	6	FAZD	Findings About Death	死亡相关发现	LOCKED	2021-08-10T14-15-53
+	7	FAZH	Findings About Hospitalization	住院相关发现	LOCKED	2021-08-10T14-15-53
+	8	ADFAMH	Findings About Medical History	病史相关发现分析数据集	LOCKED	2021-08-10T14-15-53
+	9	FAMH	Findings About Medical History	病史相关发现	LOCKED	2021-08-10T14-15-53
+	10	FAZU	Findings About Procedures	诊疗操作相关发现	LOCKED	2021-08-10T14-15-53



Future Application

- Everyone has pain points
- Everyone can develop
- Everyone can benefit



Future Application

- Applications
 - aCRF annotations and toc automation
 - sdrg/adrg automation
 - SDTM automation
 - Everything to enhance efficiency

Thank you!

Q & A



**The Global Healthcare
Data Science Community**

Contact Channels

📞 UK +44 1843 609600
📞 USA +1 609 514 5105
✉ office@phuse.global
🌐 phuse.global

Social Media

🐦 [@phusetwitta](https://twitter.com/phusetwitta)
📘 [/phusebook](https://facebook.com/phusebook)
▶ [/phusetube](https://youtube.com/phusetube)
🌐 [/company/phuse](https://linkedin.com/company/phuse)