The answer to your question

“2) out of 100 000 case how many were false positives”

“3) are false positives added to the daily count”

“4) if they are not then how do you know so quickly”

“6) of these how many were false positives”

The sensitivity of a test is also known as the true positive rate, and specificity is also known as the true negative rate.

We provide information on these test parameters here:

https://hpspubsrepo.blob.core.windows.net/hps-website/nss/2961/documents/1_cov id-19-laboratory-testing-faq.pdf

At the moment, for Scotland, the best estimate that we are aware of for sensitivity of our tests is said to be 91% (i.e. the PCR test used in that assessment picked up 91 out of 100 clinically suspected cases of COVID-19).

In the case of weakly detected positive results (i.e. not true current infection), the sample is reprocessed and if, when more detailed virology analysis has been undertaken, it is assessed that there is no current infection or infectivity present, then the original test will be taken as a false positive, de-notified, and removed from the confirmed case tally. However, where it is not possible to reprocess the test or carry out more detailed analysis, then the original test cannot be de-notified and the weak positive will remain recorded in the case tally.

This process is undertaken in relation to statistics published for daily and weekly tests carried out through both the NHS and the UK Government Extended Testing Programme in Scotland (here: https://www.gov.scot/publications/coronavirus-covid-19-daily-data-for-scotland/

No test is 100% accurate. The sensitivity of a test is the proportion of people who have the condition that is being tested for who actually have the disease. This gives the true positive rate and by extension defines the false negative rate (those who should have shown positive but the tests failed to see them as positive) Specificity is the opposite to sensitivity; it identifies the true negative rate and thus the false positive rate. Sensitivity and specificity define the accuracy of a test – how well does it rule in or rule out the diagnosis.

The type of tests being used for diagnosing covid-19 is one that detected the viral genetic sequence of the causative virus SARS-CoV-2 by a technique called real time PCR assays. These tests are very sensitive and the gold standard for respiratory viruses. They are specific and shown not to detect other coronaviruses and have been tested on large panels of negative clinical samples.

The current PCR tests in use in Scotland are effective at identifying people who have COVID-19 infection when they are symptomatic. As these tests only detect the presence of RNA from the SARS CoV-2 virus they cannot distinguish between live and inactivated virus. As a result they cannot tell us if a person is currently infective. This means that testing cannot reliably tell us if someone who does not have symptoms currently has the disease, or has had it in the past and has inactivated virus in their sample.

Weak positive results can happen when the swab picks up fragments of the virus from an individual who is no longer infectious. Laboratories in Scotland have now implemented confirmation testing (or repeat testing) in certain circumstances to confirm whether weak positive test results are actually infectious cases.

Public Health Scotland have published frequently asked questions about COVID-19 laboratory testing more information can be found at https://www.hps.scot.nhs.uk/web-resources-container/covid-19-laboratory-testing-frequently-asked-questions/

In certain situations, testing again after a number of 5 days – when levels of the virus may be higher and therefore detectable – can reduce the risk of false negative results having serious consequences. Weak positive results can happen when the swab picks up fragments of the virus from an individual who is no longer infectious.

The answer to your question

“7) of the total cases how many have died of covid 19 (fully provable not covid related because that is not a valid statistic) only certain death by covid 19”

“9 are you counting deaths of people that had cancer , or other underlying medical conditions to support the high figures”

Public Health Scotland determines confirmed COVID-19 deaths by linking the daily National Records of Scotland (NRS) file for newly registered deaths to ECOSS data, and defines a confirmed COVID-19 death as an individual who dies within 28 days of their first positive COVID-19 laboratory report. This is shown on the webpage as the daily number of new deaths and the total number of people who have died in Scotland having tested positive. This daily number of new deaths registered does not signify that this was their date of death, owing to the time allowed for families to register deaths in Scotland. This definition was updated on 31 July to align with the revised definition being used by PHS.

The trend (weekly data) in registered deaths can now be seen here: https://data.gov.scot/coronavirus-covid-19/detail.html#deaths
More information on the difference between the daily measure from PHS and these figures from NRS can be found in the NRS publication, available here: https://www.nrscotland.gov.uk/covid19stats

The answer to your question

“8 is it true you are bundling all flu, colds etc together for you to up the figures (we all know that carona viruses are many and generally not a big wow)”

Our testing method allows us to accurately test for those whose symptoms are COVID related and non COVID related.

There are two types of test for COVID-19 currently in use in Scotland: viral (PCR) testing and antibody testing.

PCR tests are used to detect if someone is currently infected with the virus; and antibody testing is used to tell us if someone has had the virus.

PCR tests, used to test for current infection, operate as a swab taken from the nose and back of the mouth, with the sample collected sent to one of the existing NHS Scotland laboratories, or the Glasgow Lighthouse Laboratory, to be analysed. Any positive cases identified are automatically followed up for contact tracing through our national system of Test and Protect.

Antibody testing is used to test for past infection. In Scotland currently, it is used to track what proportion of the population has already been exposed to the virus. We don’t yet know whether people who have had the infection are immune and cannot get infected again, nor how long any immunity, if proven, may last. Until this evidence base develops, our current policy is to use antibody testing for population surveillance purposes, and in limited clinical scenarios. In addition to PCR testing, and antibody testing, Scotland has world leading research expertise in viral genomics. Genome sequencing of the COVID-19 virus is currently being undertaken by a Glasgow and Edinburgh partnership working as part of the COVID-19 Genomics UK (COG-UK) Consortium. Whole Genome Sequencing contributes to our understanding of how the disease moves through the population and changes over time. In particular it can improve our understanding about whether cases are likely to be linked or not. As rapid sequencing is now being delivered in Scotland (with results available within 48 hours of a sample arriving at the appropriate laboratory) it has the potential to play an important role in

providing information to support the management of outbreaks. Whole genome sequencing can also show geographic links – and help us understand what region or country that virus emerged from.

No test is perfect, and understanding the limitations of the tests we currently use is important. If we assume tests are perfect, and that results always accurate, we put others at risk. In PCR testing, the key risks are false negative results – where a test is negative but the person tested does actually have COVID-19 and is infectious – and occasions where the test is positive but the person tested is not infectious.

False negative results can happen if a swab misses collecting cells infected with the virus, or if virus levels are low – for example, at the start of an infection. The risk to others of false negative results is clear – an infectious person who receives a negative result risks transmitting the virus to others, including vulnerable people who can suffer very severe harm. In certain situations, testing again after a number of 5 days – when levels of the virus may be higher and therefore detectable – can reduce the risk of false negative results having serious consequences. Weak positive results can happen when the swab picks up fragments of the virus from an individual who is no longer infectious.

Laboratories in Scotland have now implemented confirmation testing (or repeat testing) in certain circumstances to confirm whether weak positive test results are actually infectious cases.

We will also actively monitor developments around testing innovation so we can take advantage of any new opportunities from testing they present.

The answer to your question

“10 are yous ever gonna tell us the truth”

“11 why is it one law for one and not for another “

The Scottish Government and partners are publishing daily and weekly data on Coronavirus (COVID-19) in Scotland.

Much of the data reported by Scottish Government, including the figures from Public Health Scotland and the Care Inspectorate, is Management Information based on a range of operational systems. While checks are completed before publication to ensure data robustness, due to the speed of reporting these data are not currently subject to the full range of processes and quality assurance that would be required for official statistics. For more information about the data please see Data definitions and sources.
National Records of Scotland publishes the information on Deaths involving coronavirus (COVID-19) in Scotland as National Statistics.
This statement outlines the steps we have taken towards voluntary compliance with the Code of Practice for Statistics.

The code is built around 3 main concepts, or pillars:

- **trustworthiness** – having confidence in the people and organisations that produce statistics

and data
- **quality** – data and methods that produce assured statistics

value – publishing statistics that support society's needs for information.
The following describes how the pillars of the Code have been applied in a proportionate way.

Trustworthiness

To support the Scottish Government's response to the coronavirus pandemic, this Management Information is part of the operational response to the pandemic and is seen in advance of publication by Scottish Ministers and officials.

These statistics have been developed under guidance from the Heads of Health and Social Care Analysis (HSCA) Hub in the Scottish Government Covid Public Health Directorate and the Scottish Government's Chief Statistician.

The figures provided are compiled by professional Scottish Government analysts across the statistics, economist and research professions. Scottish Government works closely with partners in compiling these figures, including with Public Health Scotland on daily cases, testing and deaths data; National Records of Scotland on weekly deaths data; Health Boards on hospital and other NHS data, along with the Care Inspectorate for care homes data.

These figures have been published on the Scottish Government website on a daily basis since March. The First Minister regularly announces headline figures in her lunchtime briefings. The latest numbers are then published at 2pm each day. The figures are now updated on a daily or weekly schedule, depending on the measure. We formally pre-announce weekly publication timings to ensure that all users are aware of when updated data is available.

Additional data tables, including time series information and breakdowns by Health Board, are published alongside the main daily website update. Data previously reported on the website is made available in the Past data and trend charts for the daily updates on COVID-19. Updated Excel files are published at 2pm each day. Where figures have been revised, this is made clear and an explanation provided. Further detail on data definitions and sources is provided.

Quality

The data reported is Management Information based on a range of operational systems, including the Public Health Scotland Electronic Communication of Surveillance in Scotland (ECOSS) system.

The figures provided are compiled by professional analysts using the latest available data and applying methods using their professional judgement. They have been quality assured by the data producers and the HSCA Hub in Scottish Government.

Given the importance of this information and the level of public interest, data are released at the earliest possible opportunity. While checks are completed before publication to ensure data robustness, due to the speed of reporting these data are not currently subject to the full range of processes and quality assurance that would be required for Official Statistics. Several of the measures were developed rapidly in an initial response to the pandemic, and their definitions are reviewed over time.

Further information, including on limitations of the data, and links to data sources are provided on the accompanying Data definitions and sources page. Revisions to the data are detailed in the data tables and noted on the webpage where relevant. Any changes to the presentation and use of data are cleared with the appropriate data owners and the Heads of HSCA Hub.

Value

In publishing this data, we aim to provide evidence for Ministers, policy makers, external stakeholders and members of the public on how the coronavirus pandemic is progressing in Scotland and within Health Boards.

These figures are an important aspect of the Scottish Government's response to the coronavirus pandemic. For example, data on trends in new cases, hospital admissions and deaths has been used to evidence moves between the phases of Scotland's Route Map for transitioning out of lockdown. The timeliness of the data allows for regular monitoring of how the pandemic is changing.

Making this information available supports public scrutiny and transparency, providing timely and equal access to data for the public, media and other commentators and reducing the requirement for people to make specific information requests to Government and NHS.

The figures and analysis presented continue to evolve over time to ensure the most relevant information is included and the needs of stakeholders are met. We have responded to feedback on the clarity and usefulness of the data presented where possible.

As the suite of key national level measures around cases, numbers in hospital and ICU and deaths fell and Scotland shifted to the next phase of responding to the pandemic, HSCA Hub reviewed the published information releases to ensure our reporting remains fit for purpose and continues to meet the needs of Ministers, stakeholders and the public. Some changes to reporting were made in July 2020 to focus on data relevant to this stage in the pandemic and to suspend publication of other data that is now at very low levels and stable. We have also included links to the new regular reports and resources that Scottish Government and Public Health Scotland analysts have developed to avoid duplication of data presentation across different sources. We will continue to evaluate the frequency and focus on the information published based on need and public interest.

Decisions on levels are made by Scottish Ministers taking account of all the relevant facts and circumstances available. This includes the use of five indicators used to inform decisions on what COVID-19 level applies to each local authority, details on which are available on the Scottish Government's website in our modelling paper (published 28 October):
https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/10/coronavirus-covid-19-allocation-of-levels-to-local-authorities/documents/modelling-paper/modelling-paper/govscot%3Adocument/Modelling%2B-%2BPaper%2B-%2BLocal%2Bauthority%2Blevels%2B28%2Boct.pdf

The answer to your question

"12 were scotlands hospitals at anytime overflowing with covid cases (much evendence to the contra"

The NHS Louisa Jordan has not been required to treat COVID-19 patients because of efforts made to suppress the virus. If required, the hospital continues to remain ready to accept COVID-19 patients at a few days' notice.

- The answer to your question

  "1) Hi ide like to request the number of covid infections for sept 2020 oct 2020 and to this date nov 2020"

  "5) out of the all the cases since just after the snp took no notice of the nike conference how many total cases"

  Some of the information you have requested is available from https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/covid-19-statistical-report/9-september-2020/dashboard/ Under section 25(1) of FOISA, we do not have to give you information which is already reasonably accessible to you. If, however, you do not have internet access to obtain this information from the website(s) listed, then please contact me again and I will send you a paper copy.